

DCO

DCTT LDR:

Approved: CO

## USS COLE (DDG 67)

### DCTT BRIEF

1. GENERAL DESCRIPTION: During normal underway operations, Combat identifies incoming low slow flyers carrying Chemical gas. USS COLE passes through a chemical gas cloud, ship cannot correct course in time and must pass through the cloud.
2. OBJECTIVE: Training exercise for the crew in the use of CBR Defense.
3. Mode of training: Evaluation. General Quarters. (ORM Tenet: Supervise)
4. The training period will be between TBD.
5. FXP-4 Drill to be conducted during this training period:  
MOB-D-15-SF Chemical Attack
6. Degraded Equipment: None
7. Medical Training: None
8. LESSONS LEARNED LAST DRILL: \_\_\_\_\_
9. Repair party will be debriefed on station after the drill. DCTT debrief will be conducted following the drill.
10. DCTT/ Assignments:

DCTT Leader	LCDR	(Q)
DCC	MS1	(Q)
OOD	QMC	(Q)
Rover	GSMC	(Q)
Rover	HMCM	(Q)
Repair 2 Locker	PNC	(Q)
Repair 2 External Monitor	SKC	(Q)
Repair 2 Internal Monitor	GMC	(Q)
Repair 3 locker	HT1	(Q)
Repair 3 External Monitor	MA1	(Q)
Repair 3 Internal Monitor	SHC	(Q)
Repair 5 locker	STGM	(Q)
Repair 5 Internal Monitor	ENC	(Q)
FWD Decon	DC1	(Q)
AFT Decon	DC1	(Q)
Medical	HMC	(Q)

11. SAFETY: (ORM Tenet: Assess risks vs benefits) DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR. THE DCTT MEMBER WILL "FREEZE THE DRILL" AND NOTIFY THE DCTT LEADER OF THE SITUATION. ONCE THE SAFETY OR PROBLEM HAS BEEN CORRECTED ALL DCTT MEMBERS WILL BE NOTIFIED TO CONTINUE THE DRILL. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE DCTT LEADER OF THE SITUATION. ONLY IF PERSONNEL ARE NOT CORRECTLY HANDLING THE CASUALTY WILL DCTT ASSIST IN RESTORING THE CASUALTY. IF THE PERSONNEL INVOLVED ARE CORRECTLY RESTORING THE CASUALTY DCTT WILL EVALUATE THEIR ACTIONS. THE DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

12. (ORM Tenet: ID Hazards) Safety walk through will be conducted prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill. Notify DCTT Leader when complete.

13. DCTT Communications: DCTT WICS ITT1 channel.

14. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. -No water spray into vents, ship hull openings, weather deck electrical equipment or outlets.
- B. -No straight stream discharge from nozzles on weather decks.
- C. -Man rails/life lines must stay in place.
- D. -Set circle William prior to activating CMWD system.
- E. -No running, or straddling hoses.
- F. -Hold hand rails going up and down ladders.
- G. -Do not activate any installed firefighting systems or place the in-line educator suction apparatus in foam container.
- H. -Do not use ship's medical supplies for simulated casualties.
- I. -Observe personnel in ACPG Suits for signs of heat stress.

15. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

- A. -Activation or energizing firefighting equipment.
- B. -Contaminated materials.
- C. -Activation of CMWD.
- D. -All hands dressing in ACPG suits(one per locker).
- E. -Using actual M256.
- F. -Setting Circle William
- G. -Distributing and installing unopened canisters.
- H. -Breaking out, prepositioning and issuing protective clothing, M-291 Decontamination kits and Medical supplies.
- I. -Prepositioning and filling canteens.
- J. -Prepositioning spare clothing.
- K. -Striking down nonessential and absorbent materials.
- L. -Masking tape with M-8/9 written on it.

16. TIME LINE:

830  
MOPP LEVEL ONE - Set Readiness Condition III (if not set). Verify assignments to CBR Defense teams. Make MCU-2P gas masks available to new personnel.

30  
45  
1845  
MOPP LEVEL TWO - Ship enters op area of known or possible chemical threat. All hands required to maintain protective mask in carrier and on person. Modified Condition Zebra set throughout the ship. Test ships chemical alarm, Post M-8/9 paper and Operational Inspection of CMWD (simulated).

1845  
0900  
0915  
0915 GQ  
DCTT ACTION - Ensure all hands have protective mask on person (Hip carrier only) Ensure proper setting of mod-Z, proper posting of M8/M9 paper and ensuring decon station personnel pre-position contamination supplies.

1845  
0900  
0915  
0915 GQ  
T+45 MOPP LEVEL THREE - Tactical signal received from battle group commander "WARNING YELLOW/CHEMICAL ATTACK PROBABLE". All hands to General Quarters. Top side personnel proceed to ready shelter. Primary and Secondary decon station activated. CMWD activated intermittently (Actual on the 16<sup>th</sup> Simulated evry outhur drill). All hands don CPO suits (Hood down, boots with gloves carried) (Simulated). Repair 5 fire party will be in FFE's and also one primary hose team in lockers 2 & 3.

1845  
0900  
0915  
0915 GQ  
DCTT ACTION - Dress out one person in CPO Suit per locker. (A external Monitor). Ensure that Repair Locker is aware of who dresses out in FFE's (lighting off of OBA's will be simulated). Ensure no personnel topside and monitors are monitoring M-8/9 Paper.

1845  
0900  
0915  
0915 GQ  
T+65 MOPP LEVEL FOUR - BGC "WARNING RED/CHEMICAL ATTACK IMMINENT". All hands don Gas Mask secure CPO suit Hood and don gloves. Set Circle William Activate CMWDs continuously (Simulated). Monitor detection equipment.

1845  
0900  
0915  
0915 GQ  
DCTT ACTION - Ensure all personnel don mask properly and personnel in CPO Suits are dressed out properly. Verify Circle William with setters IAW CBR Bill (relax circle William after verification). Ensure monitors are monitoring M-8/9 paper.

1845  
0900  
0915  
0915 GQ  
T+70 CHEMICAL ATTACK

1845  
0900  
0915  
0915 GQ  
DCTT ACTION - Disclose type of cloud and ensure alarm is sounded.

1845  
0900  
0915  
0915 GQ  
T+75 CLOUD - Ship passed through the chemical cloud.

T+80 INTERNAL SURVEY - Monitors use routes IAW CBR Bill to check for contamination.

DCTT ACTION - DCTT verify routes.

T+100 EXTERNAL SURVEY - Monitors use routes IAW CBR Bill to check for contamination and make reports to bridge wing.

*for 10/13*  
DCTT ACTION - DCTT verify routes. Disclose Blister agent at FWD Station 3 and AFT Station 3 to Monitors (Use training M-256).  
*by 2 subc*

T+115 DECON STATIONS - External monitors enter the decon stations.  
(Rep 2 monitors, FWD Decon, and Rep 3 monitors report to primary decon. (AFT Decon))

DCTT ACTION - AFT. EXTERNAL DCTT stay with scrubbers. DECON STATION DCTT process external monitors through station, cut and save CPO suit for training.

T+130 Set Yoke

H+150 Secure from general Quarters

TOTAL ELAPSED TIME : 2.5 HOURS

#### OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE

EVOLUTION EVALUATION FORM

ROUTING

ITT LEADER \_\_\_\_\_

TEAM LEADER \_\_\_\_\_

EVALUATOR \_\_\_\_\_

ETT/DCTT/CSTT/STT/MTT

DATE: \_\_\_\_\_

EVOLUTION/DRILL DESCRIPTION \_\_\_\_\_

WATCHSTATION/ WATCHSTANDER \_\_\_\_\_

EVALUATOR \_\_\_\_\_

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. OTHER PROCEDURAL DEFICIENCIES NOTED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. COMMUNICATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. MATERIAL: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. TRAINING TEAM DEFICIENCIES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. RECOMMENDATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7 NF DCO: \_\_\_\_\_

DCTT LDR: \_\_\_\_\_

Approved: CO \_\_\_\_\_

Date: 15 Aug 00

**USS COLE (DDG 67)  
DCTT BRIEF**

1. GENERAL DESCRIPTION: ITT/DCTT brief. During Condition III steaming, an Air warfare operation drives the ship to General Quarters; 2 missiles hits result, 1 hit mid frame 366, and 1 hit Fwd frame 100, to the port side.

2. OBJECTIVE: Evaluation exercise for the crew in the use of damage control procedures.

3. Mode of training: Evaluation/training if needed. General Quarters. (ORM Tenet: Supervise)

4. The training period will be between TED.

5. CP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning battle stations
MOB-D-11-SF	Setting material condition (Zebra)
MOB-D-23-SF	Locating damage control fittings
MOB-D-8-SF	Major Conflagration
FSO-M-6-SF	Amputation
FSO-M-3-SF	Compound Fracture
FSO-M-11-SF	Burn
FSO-M-7-SF	Broken Jaw

6. Degraded Equipment: One NFTI I/P of being repaired by ET's. WIFCOM unreliable.

7. LESSONS LEARNED LAST DRILL: EVERYONE NEEDS TO HAVE ON THE PROPER BATTLEDRESS; WHEN USING THE WIFCOM/WICS WITH THE SCBA AMP THE SPEAKER NEEDS TO BE AT LEAST 12 INCHES FROM THE AMP, AND SPEAK SLOWLY AND CLEARLY; TWO PEOPLE TO LOWER A HATCH; SET CVHD BOUNDARIES WITHIN ALL FIRE BOUNDARIES; DOG HATCHES PROPERLY.

8. Repair party will be debriefed on the mess deck after the DCTT debrief, which will be conducted following the drill in the wardroom.

# DCTT/ Assignments:

DCTT Leader (DCC)	LCDR	(Q)
DCO	LT	(U/I)
CCS	MSI	(Q) (U/I)
OOD	QM1	(Q)
Repair 2 Leader/lkr./SCBA sta.	DC1	(Q)
Repair 2 Scene	DC1	(Q)
Repair 2 Invest	SKC	(U/I)
Repair 2	GMC	(Q)
Repair 2	PNC	(U/I)
Repair 3 Leader/locker	HT1	(Q)
Repair 3 Scene	HT1	(Q)
Repair 3 Invest	SH1	(Q)
Repair 3	EMC	(U/I)
Repair 3 SCBA STA.	ENC	(Q)
Repair 5 Leader/locker	STGC	(Q)
Repair 5 Rover	HMCM	(U/I)
Repair 5 Scene	GSCS	(Q)
Repair 5 Invest	IS1	(Q)
Repair 5	GSEC	(U/I)
Repiar 5	MA1	(Q)
Medical	HMC	(Q)
Medical	HN	(U/I)

10. SAFETY: (ORM Tenet: Assess risks vs benefits) DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY ISSUE DOES OCCUR, THE DCTT MEMBER WILL "FREEZE THE DRILL" AND NOTIFY THE DCTT LEADER OF THE SITUATION. ONCE THE SAFETY ISSUE OR PROBLEM HAS BEEN CORRECTED, ALL DCTT MEMBERS WILL BE NOTIFIED TO CONTINUE THE DRILL. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE DCTT LEADER OF THE SITUATION. ONLY IF PERSONNEL ARE INCORRECTLY HANDLING THE CASUALTY WILL DCTT ASSIST. IF THE PERSONNEL INVOLVED ARE CORRECTLY RESTORING THE CASUALTY DCTT WILL EVALUATE THEIR ACTIONS. THE DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

11. (ORM Tenet: ID Hazards) Safety walk through will be conducted prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill. Notify DCCT Leader when complete.

12. DCTT Communications: WICS CHANNEL ITT1

SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. -No charged hoses inside electrical or electronic spaces.
- B. -Hatch pins must be in place prior to transiting hatch coaming.
- C. -Only one man on a ladder at a time, (when dressed in FFE.)
- D. -Do not leave CO2, AFFF or PKP bottles upright, untended or unstowed.
- E. -Required minimum personnel on charged hoses: 1 1/2 in. - 3 persons, 2 1/2 in. - 5 persons.
- F. -Hearing protection must be worn by all personnel within 10 ft of an operating Ram fan.
- G. -Heat stress casualties will be handled immediately. Monitor for heat stress continually. If a heat stress condition occurs, remove person to cool area and inform CCS.
- H. -Charge fire hoses to the nozzle and DCTT will shut the plug valve.
- I. -No running, or straddling hoses.
- J. -Smoke from smoke machine will be only as thick to conduct a safe training atmosphere (DCTT discretion).
- K. -4 Stretcher Bearers per stretcher when transporting casualty.

14. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

- A. -Activation or energizing of firefighting equipment.
- B. -Smoke & fire symptoms.
- C. -Electrical isolation.
- D. -Overhaul of space.
- E. -Breaking of Draeger tubes.
- F. -Relaxing of FFEs and SCBA facepieces once Battle dress SAT, as briefed.
- G. -Food service personnel will continue meal prep if required.
- H. -Dewatering procedures.
- I. -Cutting locks on spaces containing fire boundaries.
- J. -Fuses from fuse panels will not be pulled unless actual emergency.
- K. -Only rake brought to the scene for overhaul.
- L. -Charged hoses will be bun-gee corded by DCTT(actual casualty removed).
- M. -Activation of SCBAs and EEBDs as briefed.
- N. -No cutting of shoring or wedges except as briefed.
- O. -First Aid Supplies.

15. DCTT PROP LIST:

- [ ]A. -SMOKE - Machine (Rep5 & 3 will use white rags)
- [ ]B. -FIRE - Red /White Rags
- [ ]C. -H/J - BUBBLE RAP
- [ ]D. -R - Plastic prop w/rag streamers and water spray
- [ ]E. -C - Strobe light
- [ ]F. -Medical Moulage
- [ ]G. -C/D - Picture
- [ ]H. -H Cardboard (LARGE) / Plastic (SMALL)
- I. -PFL - Stick w/rag
- J. -C - Strobe light
- K. -/\\//\\ - Metal plate
- L. -Sagging Overhead - White Sheet



M. -Buckling Bulkhead - plastic prop.

16. TIME LINE: EVENT (All times are approximate)

T= 0730-0800 DCTT safety walk thru

T= -01 Plane Approach

T= .0 GENERAL QUARTERS

T= +7 Zebra Checks

T= +15 missile hit Fwd and Aft.

a. -Hit Alpha / Hit Bravo  
REP 3

b. -A Crew Training Room

c. -S Crew Training Room

d. -A Berthing #7

e. -S Berthing #7

f. -H fr. 366 (Bulkhead)

g. -H fr. 366 (Deck)

REP 5

h. -C Log Rm.

i. -A Log Rm.

j. -S Log Rm.

k. -P RLL (fracture jaw/leg)

l. -R AFFF

REP 2

m. -A Berthing #1

n. -S Berthing #1

o. -A berthing #2

p. -S Berthing #2

q. -H fr. 100 (Bulkhead)

r. -H fr. 100 (Deck)

Rep 2

a. -P Access Person  
(burn/amputation of hand)

T= +35

T= +75 Debrief on station.

T= +80 Set yoke restow all gear.

T= +90 Secure from GQ.

**OPERATIONAL RISK MANAGEMENT**

- IDENTIFY HAZARDS**
- ASSESS THE RISKS vs BENIFITS**
- EVALUATE CONTROL OPTIONS**
- SUPERVISE**

USS COLE DDG-67

BATTLE DAMAGE

DATE \_\_\_\_\_

REPAIR 2	REPAIR 3	REPAIR 5
MISSILE	MISSILE	NEAR-MISS
<u>A</u> COMPT. # 2-78-01-L Berthing #1	<u>A</u> COMPT. # 2-350-2-L Training Room	<u>C</u> COMPT. # 1-258-3-Q Log Room
<u>A</u> COMPT. # 3-97-02-L Berthing #2	<u>A</u> COMPT. # 3-338-2-L Berthing 7	<u>H/J</u> FITTING # COMPT. #
<u>H</u> SIZE 3 FT COMPT. # 2-78-01-L FRAME 110	<u>H</u> SIZE 2 FT COMPT. # 2-350-2-L FRAME 250	<u>A</u> COMPT. # 1-258-3-Q <u>C</u> WILL SPREADS TO AN <u>A</u>
<u>H</u> SIZE 3 FT COMPT. # 3-97-02-L FRAME 110	<u>H</u> SIZE 2 FT COMPT. # 3-338-2-L FRAME 250	<u>R</u> SYSTEM LOST AFFF COMP. # 1-174-01-L FRAME 180 (Port) COV 1-156-1, 1-195-1
<u>S</u> COLOR White COMPT. # 2-78-01-L Berthing #1	<u>S</u> COLOR White COMPT. # 2-350-2-L Training Room	
<u>JR</u> White COMPT. # 3-97-02-L Berthing #2	<u>S</u> COLOR White COMPT. # 3-338-2-L Berthing 7	<u>S</u> COLOR BLUE/WHITE COMPT. # 1-258-3-Q
<u>P</u> Access Person COMPT. # 2-78-01-L Fan Room Hand Amputation / Burn	<u>P</u>	<u>P</u> Locker Leader COMPT. # 1-174-01-L passage Compound Fracture (L/Leg
<u>FB</u> S 78 P 62 P 126 S 174	<u>FB</u> S 300 P 338 P 350 S 370	<u>FB</u> S 220 P 254 P 300 S 338
PROPS / REMARKS SAG - Plastic SMOKE - Machine FIRE - Rag HOLE - Plastic R/PIPE - Plastic C/D - Picture	PROPS / REMARKS PANT - Plastic SMOKE - machine FIRE - Rag HOLE - Plastic R/PIPE - Plastic C/D - Picture	PROPS / REMARKS Fire - Rags Smoke - Rags H/J - Bubble Wrap
DCTT	DCTT	DCTT
As Noted on Brief	As Noted on Brief	As Noted on Brief

EVOLUTION EVALUATION FORM

ROUTING

ITT LEADER

TEAM LEADER

EVALUATOR

ETT/DCTT/CSTT/STT/MTT

DATE: \_\_\_\_\_

EVOLUTION/DRILL DESCRIPTION \_\_\_\_\_

WATCHSTATION/ WATCHSTANDER \_\_\_\_\_

EVALUATOR \_\_\_\_\_

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

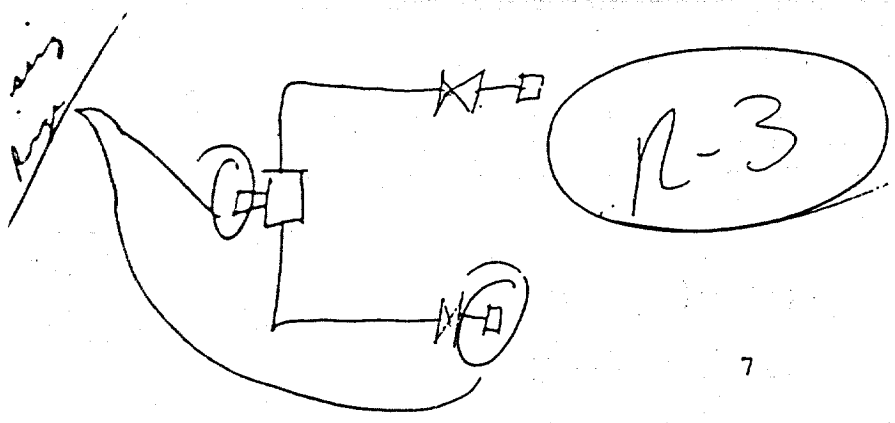
2. OTHER PROCEDURAL DEFICIENCIES NOTED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

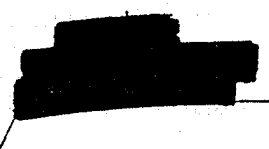
COMMUNICATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. MATERIAL: A-3 Race's : Longing HOSE, missing O-RINGS, (C/Having to  
pull out a clamp to the end

5. TRAINING TEAM DEFICIENCIES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. RECOMMENDATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



DCTT LDR: 

Approved: CO 

Date: 20 Aug 00

USS COLE (DDG 67)  
DCTT BRIEF

1. GENERAL DESCRIPTION: ITT/DCTT brief. During normal underway operations, an Air warfare operation drives the ship to General Quarters; 2 missiles hits, 1 hit mid frame 310 and 1 hit Fwd frame 110, to the port side.

2. OBJECTIVE: Evaluation exercise for the crew in the use of damage control procedures.

3. Mode of training: Evaluation/training if needed. General Quarters. (ORM Tenet: Supervise)

4. The training period will be between TBD.

5. FXP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning battle stations
MOB-D-11-SF	Setting material condition (Zebra)
MOB-D-23-SF	Locating damage control fittings
MOB-D-8-SF	Major Conflagration
FSO-M-3-SF	Compound Fracture
FSO-M-7-SF	Broken Jaw

6. Degraded Equipment: WIFCOM unreliable.

7. LESSONS LEARNED LAST DRILL: EVERYONE NEEDS TO HAVE ON THE PROPER BATTLEDRESS; EMERGENCY AIDE INJURED UNTIL MEDICAL HELP ARRIVES; EXPIDITE INSPECTION OF SURROUNDING SPACES AND REPORT; TWO PEOPLE TO LOWER A HATCH; SET OVHD BOUNDARIES WITHIN ALL FIRE BOUNDARIES; DOG HATCHES PROPERLY.

8. Repair party will be debriefed on the mess deck after the DCTT debrief, which will be conducted following the drill in the wardroom.

9. DCTT/ Assignments:

DCTT Leader (DCC)	LCDR	(Q)
DCO	LT	(Q)
ROVER	GSMC	(Q)
CCS	MS1	(Q) (U/I)
OOD	QM1	(Q)
Repair 2 Leader/lkr./SCBA sta.	DC1	(Q)
Repair 2 Scene	DC1	(Q)
Repair 2 Invest	SKC	(U/I)
Repair 2	GMC	(Q)
Repair 2	PNC	(U/I)
Repair 3 Leader/locker	HT1	(Q)
Repair 3 Scene	HMC	(Q)
Repair 3 Invest	SH1	(Q)
Repair 3	EMC	(U/I)
Repair 3 SCBA STA.	ENC	(Q)
Repair 5 Leader/locker	STGCM	(Q)
Repair 5 Scene	GSCS	(Q)
Repair 5 Invest	MA1	(Q)
Repair 5	GSEC	(U/I)
Medical	HMC	(Q)
Medical	HN	(U/I)

10. SAFETY: (ORM Tenet: Assess risks vs benefits) DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR, THE DCTT MEMBER WILL "FREEZE THE DRILL" AND NOTIFY THE DCTT LEADER OF THE SITUATION. ONCE THE SAFETY ISSUE OR PROBLEM HAS BEEN CORRECTED, DCTT MEMBERS WILL BE NOTIFIED TO CONTINUE THE DRILL. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE DCTT LEADER OF THE SITUATION. ONLY IF PERSONNEL ARE INCORRECTLY HANDLING THE CASUALTY WILL DCTT ASSIST. IF THE PERSONNEL INVOLVED ARE CORRECTLY RESTORING THE CASUALTY DCTT WILL EVALUATE THEIR ACTIONS. THE DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

11. (ORM Tenet: ID Hazards) Safety walk through will be conducted prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill. Notify DCCT Leader when complete.

12. DCTT Communications: WICS CHANNEL

ITT2

13. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- 1. -No charged hoses inside electrical or electronic spaces.
- 3. -Hatch pins must be in place prior to transiting hatch coaming.
- c. -Only one man on a ladder at a time, (when dressed in FFE.)
- D. -Do not leave CO2, AFFF or PKP bottles upright, untended or unstowed.
- E. -Required minimum personnel on charged hoses: 1 1/2 in. - 3 persons, 2 1/2 in. - 5 persons.
- F. -Hearing protection must be worn by all personnel within 10 ft of an operating Ram fan.
- G. -Heat stress casualties will be handled immediately. Monitor for heat stress continually. If a heat stress condition occurs, remove person to cool area and inform CCS.
- H. -Charge fire hoses to the nozzle and DCTT will shut the plug valve.
- I. -No running, or straddling hoses.
- J. -Smoke from smoke machine will be only as thick to conduct a safe training atmosphere (DCTT discretion).
- K. -4 Stretcher Bearers per stretcher when transporting casualty.

14. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

- A. -Activation or energizing of firefighting equipment.
- B. -Smoke & fire symptoms.
- C. -Electrical isolation.
- D. -Overhaul of space.
- E. -Breaking of Draeger tubes.
- F. -Relaxing of FFEs and SCBA facepieces once Battle dress SAT, as briefed.
- G. -Food service personnel will continue meal prep if required.
- . -Dewatering procedures.
- . -Cutting locks on spaces containing fire boundaries.
- . -Fuses from fuse panels will not be pulled unless actual emergency.
- K. -Only rake brought to the scene for overhaul.
- L. -Charged hoses will be bun-gee corded by DCTT (actual casualty removed).
- M. -Activation of SCBAs and EEBDs as briefed.
- N. -No cutting of shoring or wedges except as briefed.
- O. -First Aid Supplies.

15. DCTT PROP LIST:

- A. -SMOKE - Machine
- B. -FIRE - Red /White Rags
- C. -H/J - BUBBLE RAP
- D. -R - Plastic prop w/rag streamers and water spray
- E. -C - Strobe light
- F. -Medical Moulage
- G. -C/D - Picture
- H. -H Cardboard (LARGE) / Plastic (SMALL)
- I. -PFL - Stick w/rag
- J. -C - Strobe light
- K. -/// - Metal plate
- L. -Sagging Overhead - White Sheet
- M. -Buckling Bulkhead - plastic prop.

6. TIME LINE: EVENT (All times are approximate)

T= 0800-0830 DCTT safety walk thru  
T= -01 Plane Approach  
T= 0 GENERAL QUARTERS  
T= +7 Zebra Checks  
T= +15 missile hit Fwd and Aft.

*high safety*

*O-rings for SCRP recharging stations*

*T, 5 2w drift*

*Electrical  
shock in  
CIC*

T= +35

T= +75

T= +80

T= +90

Debrief on station.

Set yoke restow all gear.

Secure from GQ.

a. -Hit Alpha / Hit Bravo  
REP 3

b. -A Berthing #3  
c. -S Berthing #3  
d. -A Berthing #5  
e. -S Berthing #5  
f. -H fr. 310 (Bulkhead)  
g. -H fr. 320 (Deck)

REP 2

m. -FL Berthing #1  
n. -PFL Berthing #2  
o. -H fr. 110 (Bulkhead)  
p. -H fr. 110 (Deck)

Rep 3

a. -P Access Person  
(Compound fracture/broken jaw)

*Rep 5 split / help  
renew occurs  
342*

*Smoke generators*

OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE



U: HOLE DDG-67

BATTLE DAMAGE

DATE

REPAIR 2 MISSILE	REPAIR 3 MISSILE	REPAIR 5
FL COMPT. # 2-78-1-L Berthing #1	A COMPT. # 2-300-1-L Berthing #3	
PFL COMPT. # 3-97-2-L Berthing #2	A COMPT. # 3-310-2-L Berthing #5	
H SIZE 3 FT COMPT. # 2-78-1-L FRAME 110	H SIZE 2 FT COMPT. # 2-300-1-L FRAME 310	
H SIZE 3 FT COMPT. # 3-97-2-L FRAME 110	H SIZE 2 FT COMPT. # 3-310-2-L FRAME 320	
	S COLOR White COMPT. # 2-300-1-L Berthing #3	
	S COLOR White COMPT. # 3-310-2-L Berthing #5	
	P Access Person COMPT # 2-300-1-L Repair 3 Compound Fracture/Broke Jaw	
FLB SF 50 PF 78 PA 126 SA 174	EB SF 254 PF 300 PA 338 SA 370	
PROPS / REMARKS HOLE - Plastic C/D - Picture FL- Green Rags FLLVL- Stick	PROPS / REMARKS SMOKE Machine FIRE Rag HOLE Plastic C/D Picture	
DCTT	DCTT	DCTT
As Noted on Brief	As Noted on Brief	As Noted on Brief

EVC TION EVALUATION FORM

ROUTING

ITT LEADER \_\_\_\_\_  
TEAM LEADER \_\_\_\_\_  
EVALUATOR \_\_\_\_\_

DATE: \_\_\_\_\_

ETT/DCTT/CSTT/STT/MTT

EVOLUTION/DRILL DESCRIPTION \_\_\_\_\_

WATCHSTATION/ WATCHSTANDER \_\_\_\_\_

EVALUATOR \_\_\_\_\_

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. OTHER PROCEDURAL DEFICIENCIES NOTED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. COMMUNICATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. MATERIAL: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. TRAINING TEAM DEFICIENCIES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. RECOMMENDATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DCO

DCTT LDR:

Approved: CO

USS COLE (DDG 67)

DCTT BRIEF

MAIN SPACE FIRE DRILL (U/W)

Compt 4-254-0-E Noun Name MER 2 Date: 18 Aug 00

1. GENERAL DESCRIPTION: During normal underway operations, a flammable liquid leak/spray is discovered in NR 2 Main Engine Room, resulting in a major class "B" fire. The EOOW directs space isolation and initial fire fighting efforts. The ERO/PSM/ARO attempt to combat the fire. The fire is declared out of control and the space is evacuated. Primary HALON is activated which is evaluated as good/bad. If bad, Scene Leader activates reserve HALON which is evaluated as good/bad. The fire party must/does not need to enter the space to combat the fire.

2. OBJECTIVE: Training/Evaluation. General Quarters. (ORM Tenet: Supervise)

3. FXP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning Battle Stations
MOB-D-9-SF	Main Space Fire Drill
MOB-D-11-SF	Setting Material Condition (Yoke and Zebra)
MOB-D-23-SF	Locating DC Fittings

The training period will be between TBD.

5. LESSONS LEARNED LAST DRILL: Desmoking IAW MSFD. Use standard phraseology during communications. Plugman needs to bring AFFF to the scene. Flake fire hoses properly prior to charging. Establish fire boundaries.

6 Lockers will be debriefed at Repair lockers after the DCTT debrief. DCTT debrief will be conducted following the drill in the Wardroom.

7. DCTT/ETT Assignments:

DCTT Leader (DCC)

DCC

OOD

Scene Leader

#1 Hose

#2 Hose

In Space #1

In Space #2

Investigators

Boundrymen

Electrical Isolation

Mechanical Isolation

BACS

AFFF Operator

Medical

LCDR

MS1

QM1

DC1

GMC

SKC

GSMC

DC1

SH1

GSEC

IS1

FCC

STGC

EMC

HT1

ENC

PNC

HMC

(Q)

(Q) (U/I)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(U/I)

(Q)

(U/I) → must be w/5 min

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

ETT Leader  
SPACE ETT

LT [REDACTED]  
GSCS [REDACTED]

(Q)  
(Q)

8. SAFETY: (ORM Tenet: Assess risks vs benefits) ETT/DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR, THE ETT/DCTT MEMBER WILL CORRECT THE SAFETY VIOLATION AND NOTIFY THE ETT/DCTT LEADER OF THE SITUATION. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, ETT/DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE ETT/DCTT LEADER OF THE SITUATION. ETT/DCTT WILL ALLOW WATCH STANDERS TO HANDLE THE ACTUAL CASUALTY. IN THE EVENT WATCH STANDERS DO NOT HANDLE THE ACTUAL CASUALTY, THE ETT/DCTT WILL STEP IN AND TAKE CORRECTIVE ACTION. THE ETT/DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

9. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. Observe personnel dressed out in fire fighting ensembles for signs of heat stress.
- B. Ensure hoses are charged and then secured at the plug and that electrical equipment is not hosed down.
- C. Ensure SCBA cylinders are properly secured when not in use.
- D. No running.
- E. No straddling of hoses.
- F. Two or more people lifting/lowering water tight hatches.
- G. No leaving CO2 or PKP bottles upright untended or unstowed.
- H. No overriding or bypassing safety interlocks.
- I. No loose deck plates, which must have at least two bolts per deck plate.
- J. Ensure personnel wear proper hearing protection.
- K. Ensure personnel remain clear of rotating shafts or machinery.
- L. Do not work on live (energized) electrical equipment without the Commanding Officer's permission and only per NSTM 300.

10. (ORM Tenet: ID Hazards) Safety walk through has been/will be conducted immediately prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill.

11. Heat stress survey to be conducted prior to commencement of drill.

Follow on survey due: \_\_\_\_\_.

12. DCTT Communications: WICS channel ITT1.

## PART I: ETT

SCENARIO: A major fuel leak develops in MER 2 LL (4-254-0-E), AFT/Centerline at the #2X Fuel Oil Service Pump (36/72 gpm @ 105 psi) inlet to the discharge gage cutout valve. The leak may be isolated locally in MER 2 LL by securing #2A F/O service pump locally or remotely. After the response team has demonstrated the proper initial actions in flushing and covering the fire hazard, DCTT will flash into a fire. The ignition source will be the #2A F/O Service Pump motor.

Method of Imposing Casualty: ETT will initiate drill by giving F/O smell to watch standers.

Method of Imposing Leak: Smell of fuel oil from sample bottle. Spray water from spray bottle and yellow rags to show leak.

Proper initial actions observed by ETT/DCTT for the leak are:

- Report leak to CCS (location, size)
- EOOW recommend OOD sound General Quarters and pass word for a major fuel/lube oil leak in MER 2.
- EOOW follows EOCC/MSFD procedures for a major fuel oil/lube oil leak.
- Isolate the leak/deflect leak away from the heat source. Secure #2A Fuel Oil Service Pump.
- Obtain and shoulder an EEBD.
- Secure heat sources/operating equipment.
- Activate AFFF bilge sprinkling for 1 minute.

Method of Imposing: WATCHSTANDER WILL PUSH AFFF BILGE SPRINKLING BUTTON.

- Activate AFFF hose reels to flush flammable liquid to the bilge. When watch stander(s) test AFFF agent, SPACE ETT will disclose AFFF check SAT/UNSAT.

Method of Imposing: AFFF-ZIP LOCK BAG OF WHITE STYROFOAM PEANUTS.

- Deploy PKP extinguishers to the scene. SPACE ETT will disclose agent check SAT/UNSAT.

Method of Imposing: purple rag in zip-lock bag.

NOTE: AFFF DCTT will place AFFF station in Re-circulation. Once the AFFF station is activated, AFFF DCTT will secure motor locally to minimize wear and tear on the isolation valve. In the event of actual casualty AFFF DCTT will place station back in normal operation. AFFF flow rate:

MER 2	460 gpm/26 sprinkler heads = 27.5 gallons of AFFF per minute
	190 gpm/2-95 gpm nozzles = 11.5 gallons of AFFF (simulate)
	5 gallons of AFFF per flag = approx 5 flags per minute (bilge spr)
	= approx 1 flag per minute per nozzle

- Apply AFFF to flush flammable liquid to the bilge.

When the SPACE ETT is satisfied with the watch standers initial actions and the flammable liquid is being flushed into the bilges, the SPACE DCTT will disclose to the SPACE watch that a fire has broken out in the bilges.

Method of Imposing: RED RAG TO INDICATE FIRE. BLACK RAG TO INDICATE SMOKE.

# PLANT STATUS

PLANT READINESS (MODE)

GAS TURBINE ENGINES

GAS TURBINE GENERATORS

A/C PLANTS

L/O SERVICE PUMPS

F/O SERVICE PUMPS

SEAWATER SERVICE PUMPS

FIRE PUMPS

L/O PURIFIERS

F/O PURIFIERS/XFR PUMPS

HPAC/HPAD'S

PAC'S

LPAD'S

F/O SERVICE TANK ON SUCTION

FULL SPLIT TRAIL AUX COLD IRON

(1A) 1B 2A (2B)  
 (1) (2) 3 // (SPLIT) PLANT PARALLEL

(1) 2 3 (4)

1A (1B) 2A (2B)

1A (1B) 2A (2B)

1 (2) 3 (4) (5)

1 (2) 3 4 (5) 6

(1) (2)

1 2

(#1) (AUTO / MANUAL) #2 (AUTO / MANUAL)

(#1) (115 / 120 / 125)

(#2) (115 / 120 / 125)

(#3) (115 / 120 / 125)

1 (2) 3 4

(1A) 1B 2A (2B)

OOC EQUIPMENT: NONE

ADDITIONAL COMMENTS:

## PART II: DCTT

### SEQUENCE OF EVENTS:

1. SPACE ETT/DCTT will disclose that the fire is increasing in intensity. The fire will continue to grow to the point that it is out of control and evacuation is necessary.

Method of Imposing: ADVANCE ON WATCHSTANDERS WITH RED AND BLACK RAGS.

2. Upon evacuating the space, watch stander will demonstrate SEED (by reaching for it and shouting out "activating SEED") and don a(n) training EEED.

NOTE: MECHANICAL ISOLATION DCTT and ELECTRICAL ISOLATION DCTT will check for mechanical and electrical isolation of systems in the space. DCA/Scene Leader will make the decision to electrically isolate space lighting based on space conditions and if HALON bad scenario develops because of watch standers' actions.

Method of Imposition: As Found.

If HALON bad, Team leader/investigators will see sparks from strobe light. After electrical isolation has been verified by IN SPACE DCTT, Electrical Isolation DCTT will restore lighting to the space.

Electrical isolation will be complete with the following exceptions:

#2 SCU	2A/2B IECs	#2 GTG LOCOP
#2 NBPS	IVCS jack boxes/phones	LMC and LMC lighting
WOT (5-220-1-F)	TLI2A/2GTG Blow in door heater	Halon indicators

NOTE: After watch standers evacuate the space, ETT/DCTT will check that the following actions are being completed:

- A. Securing of hatch to the space (setting Zebra).
- B. Pulling of emergency trips.
- C. Accounting for evacuees.
- D. Activation of bilge sprinkling.
- E. HALON activated, insure discharge, open bypass if necessary.

NOTE: DCTT will check that watch standers report to CCS.

3. Halon activation/ventilation trip will be disclosed by OSL DCTT manually by operating the sensor when a watch stander activates the system.

Method of Imposing: ACTIVATION OF CO2 BOTTLE PROP. DCTT LIFTING OF PNEUMATIC SWITCHES.

NOTE: HALON may be activated from either the affected space or from the DC Deck. In the event that it is activated from the space, the IN SPACE DCTT will prevent the watch stander from ACTUALLY charging the system and will report to the OSL DCTT so that he can activate alarms.

NOTE: IN SPACE DCTT will check for in space alarm activation (lights, horn) and ventilation shut-down. DCC DCTT check activation and vent shut-down alarms in CCS.

4. Primary HALON activation/discharge will be: (choose)

4. Primary HALON activation/discharge will be: (choose)

- XXX A. GOOD provided watch stander actions are correct (DC deck access closed and dogged down; all module doors and other fittings open to outside atmosphere are closed). This will be disclosed with a white disk held in view port. Fire party will wait for a minimum 15 minute soak time and then reenter space. If watch stander actions are incorrect, then indicate HALON BAD.
- B. BAD is indicated with a black disk by DCTT (this will require Reserve HALON to be activated when determined by OSL). DCTT will disclose to OSL that primary HALON failed due to a ruptured pipe downstream of the time delay. Additionally, if HALON is BAD, no indication of HALON release will be seen on DC Console and outside the affected space after 60 seconds. If reserve HALON is GOOD as disclosed by DCTT, then a white disk will be displayed. Fire Party will wait for a minimum 15 minute soak time and then reenter space.
- C. BAD as indicated with a black disk by DCTT. When determined by OSL, reserve HALON will be activated but will be disclosed by DCTT as BAD with no indication on DC Console or on bulkhead outside the affected space after 60 seconds. Fire party will then enter the space.

Method of Imposing for (BAD): Primary Halon--No lifting of pneumatic switches (bad CO2 Bottle). Reserve Halon--Lifting pneumatic switches but no discharge switch (bad time delay). If watch stander attempts to open bypass valve DCTT will give valve handle to watch stander (broken valve).

NOTE: (GOOD scenario only) If personnel fail to activate HALON or close up the space properly as determined by the DCTT, then HALON will be BAD (DCTT props will change accordingly). The fire party shall enter the space and fight the fire. They should demonstrate their ability in hose handling, team coordination, communication, knowledge of major equipment location, and overhauling the fire.

5. When BOUNDARY DCTT is satisfied with the level of knowledge and proficiency of the fire boundary setters, he will disclose boundaries are hot for bad scenario cool for good.

Method of Imposing: (Bad) Gray BUBBLE WRAP / (Good) as found

6. One investigator will transit down the escape trunk to investigate the status of HALON. The other investigator will remain on the DC Deck. They will report conditions as found to the Scene Leader and Repair Party Leader. Once the smoke and fire boundaries, OOD, Scene Leader and investigators have reported conditions of the fire, the DCA shall make the call that HALON is GOOD/BAD.

Method of Imposing: (BAD) Black disk in view port/ hot boundaries/ black smoke from vents--OOD/ hot door--Scene Leader/ strobe light in L/L view port  
(GOOD) white disk in view port

7. Scene Leader energizes bilge sprinkling for an additional 2 minutes. At the conclusion of the 2 minute period, the Scene Leader will secure the bilge sprinkling system.



- . #1 HOSE DCTT will prevent #1 plug man from activating AFFF hose reel.
9. #2 HOSE DCTT will remove Inline Eductor hose from AFFF can before charging the hose and secure #2 hose at the FIRE PLUG AFTER #2 HOSE has been charged.
10. SCBA control will be maintained by the DCTT at the SCENE. all Personnel who will actually activate an SCBA.
11. When the team tests the agent, On Scene DCTT will disclose agent check. SAT.

Method of Imposing: AFFF - ZIP LOCK BAG WITH WHITE STYROFOAM PEANUTS.

12. When access man checks hatch for heat, On Scene DCTT will disclose a HOT hatch for bad scenario or cool for good.

Method of Imposing: (BAD) GRAY BUBBLE WRAP/ (GOOD) AS FOUND

13. As the fire party enters the space IN SPACE DCTT will disclose smoke is in the space.

Method of Imposing: Smoke generator

14. When all readily visible flames have disappeared, the team leader will declare "Fire Out, Re-flash Watch Set".

Method of Imposing: RED AND BLACK RAGS BEHIND THE BACK.

5. As the team leader investigates the space for Hot Spots/Hang Fires using ne NFTI, IN SPACE DCTT will disclose 1 Hot Spot(s)/Hang Fire(s).

Method of Imposing: canteen with hot water.

16. When Team Leader checks bilge for AFFF coverage. IN SPACE DCTT discloses there is a vapor lock on all bilge surfaces.

Method of Imposing: White sheet laying in bilge

17. When overhaul gear and second hose team enters the space and reaches lower level, the IN SPACE DCTT will disclose the fire is overhauled.

Method of Imposing: Team Leader will instruct hose teams how overhaul will be conducted in space. Overhaul will be complete when all bilge surfaces are vapor secured.

18. DCA orders desmoking procedures for the affected space, IN SPACE DCTT will determine Fire Team's knowledge of desmoking procedures as space is desmoked.

Method of Imposing: DESMOKING OF SPACE USING POSITIVE VENTILATION.

19. Gas Free Petty Officer will calibrate the atmospheric test gear on main deck. He will be questioned by DCTT regarding knowledge of equipment and procedures.
20. Once desmoking is complete, DCTT will stop drill and debrief on station.

## SYMPTOMS

### A. LEAK:

- (1) High bilge level alarm.
- (2) Low tank level alarm.
- (3) Smell of fuel/lube oil in space.
- (4) Flammable liquid in bilge.
- (5) Faulty flange/piping/flex hose/mechanical seal.

### B. FIRE:

- (1) Smoke and flames in space.
- (2) Smoke and fire alarms.
- (3) Hot Hatch, Hot Bulkhead.

## 22. CAUSES

- A. Major lube oil leak.
- B. Major fuel oil leak.
- C. Electrical fire.

## 23. AUTHORIZED DISCLOSURES:

1. -Lifting of sensor alarms to indicate flooding.
2. -Opening of F/O Unloader By-pass Vlv for loss of F/O pressure.
3. -Spray bottle with yellow rag indicating Fuel Oil/Lube Oil leak.
4. -Yellow rag on deck indicating Fuel Oil/Lube Oil on deck.
5. -Fire out of control: Waving red rag vigorously over head.
6. -Fire contained: Rags waved at waist level.
7. -Fire out: Rags placed behind back.
8. -Halon flooding indications: Activation of appropriate pressure switches.
9. -Dropping AFFF tank level: Using magnet/tape on sight glass.
10. -Hot bulkhead or door disclosed by placing bubble wrap on bulkhead or Door.
11. -Rags placed in bilge for hazard being flushed to bilge.
12. -Alarm indications in CCS.
13. -Halon good indication: No disk/white disk placed at portholes.
14. -Halon bad indication: Black disk placed at portholes.
15. -Zip lock bag with purple rag indicates PKP test satisfactory.
16. -Zip lock bag with white styrofoam peanuts on deck for AFFF hose test.
17. -Tap on PKP bottle for empty bottle.
18. -Apply stickies with handwritten notes to disclose various parameters to CCS/EDO.
19. -Apply strip of masking tape to locks simulated cut.
20. -Desmoking complete, (no actual smoke) removal of black rags on hanger.
21. -AFFF fake activator buttons over actual button covers.
22. -Halon 5LB co2 bottle prop.

23. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

1. -Activation or energizing firefighting equipment as briefed.
2. -Lightoff of SCBAs and EEBDs except as briefed.
3. -Maneuvering the ship to minimize smoke re-ingestion.
4. -Smoke observations by the OOD
5. -Halon 15 min. soak time.
6. -Fuel Oil/Lube Oil leak..
7. -Liquid in bilge.
8. -Smoke & fire symptoms.
9. -Electrical & mechanical isolation as briefed.
10. -Rake will be only overhaul gear item taken into space.
11. -Overhaul of space.
12. -Starting and stopping of engineering equipment, except as authorized by ETT/DCTT.
13. -Breaking of Draeger tubes.
14. -Open Repair Lockers 2, 3, and 5 prior to drill.
15. -Relaxing of FFEs and SCBA facepieces once Battle dress sat as briefed.
16. -Food service personnel will continue meal prep if required.
17. -Dewatering procedures.
18. -Cutting locks on spaces containing fire boundaries.
19. -Bolt cutters will be taped over during drill.
20. -Charging hoses as briefed.
21. -Charged hoses will be closed by taped/bungee cord by DCTT (actual casualty removed.)
22. -Setting positive and negative ventilation.
23. -CCS starting standby GTG.
24. -CCS watch isolation of EPCC Fuses as briefed.
25. -Muster non-duty section personnel.
26. -Fuses from fuse panels will not be pulled unless actual emergency.  
A tag will be hung indicating fuse was pulled.

OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE

# EVOLUTION EVALUATION FORM

## ROUTING

ITT LEADER \_\_\_\_\_  
TEAM LEADER \_\_\_\_\_  
EVALUATOR \_\_\_\_\_

ETT/DCTT/CSTT/STT/MTT

DATE: \_\_\_\_\_

EVOLUTION/DRILL DESCRIPTION \_\_\_\_\_

WATCHSTATION/ WATCHSTANDER \_\_\_\_\_

EVALUATOR \_\_\_\_\_

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_

2. OTHER PROCEDURAL DEFICIENCIES NOTED: lost track of ATFF

o Evacuation procedure o still running in space  
o Evacuation of rep 5

3. COMMUNICATIONS: 504 Speech leader on MC

Ann'd for speech leader to Rep 2

Speech machine

MATERIAL: water to Rep 3

- C. plant ground on 3 sur 30

5. TRAINING TEAM DEFICIENCIES: > Checklists

6. RECOMMENDATIONS:

> Recommendations to retain isolation

> No Repair locker evacuating into Water bar?

> Use Checklists more effectively

> Unit Rep 2 host team

vice Rep 3

> Boundary setting thing

1-mech isolation?

- still no confirmation of ATFF may?

- Rep 5 & Rep 7?

- SCBA checkouts?  
on flight deck

1341 - GQ

1342 - Class B

- (L) B fire out of control

1343 - Main activity

350 Main effecting } → MC  
→ 1st rep. / unit 10

DCO

DCTT LDR.

Approved: CO

USS COLE (DDG 67)

## DCTT BRIEF

## MAIN SPACE FIRE DRILL (U/W)

Compt 4-174-0-E Noun Name MER 1 Date: 29 SEP 01

1. GENERAL DESCRIPTION: During normal underway operations, a flammable liquid leak/spray is discovered in NR 1 Main Engine Room, resulting in a major class "B" fire. The EOOW directs space isolation and initial fire fighting efforts. The ERO/PSM/ARO attempt to combat the fire. The fire is declared out of control and the space is evacuated. Primary HALON is activated which is evaluated as good/bad. If bad, Scene Leader activates reserve HALON which is evaluated as good/bad. The fire party must/does not need to enter the space to combat the fire.

2. OBJECTIVE: Training/Evaluation General Quarters. (ORM Tenet: Supervise)

3. FXP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning Battle Stations
MOB-D-9-SF	Main Space Fire Drill
MOB-D-11-SF	Setting Material Condition (Yoke and Zebra)
MOB-D-23-SF	Locating DC Fittings

The training period will be between TBD.

LESSONS LEARNED LAST DRILL: OSL needs to know space layout and establish choke points. Ensure investigators correctly identify halon on release panel. Quickly and correctly establish fire boundaries and report.

6 Lockers will be debriefed at Repair lockers after the DCTT debrief. DCTT debrief will be conducted following the drill in the Wardroom.

## 7. DCTT/ETT Assignments:

DCCT Leader (DCC)

DCC

Rover

OOD

Scene Leader

Locker Leader

#1 Hose

#2 Hose

In Space #1

In Space #2

Investigators

Boundrymen

Electrical Isolation

Mechanical Isolation

AFFF Operator

Medical

ETT Leader

SPACE ETT

LCDR

MS1

GSMC

QMC

DC1

HMCM

GMC

SKC

DC1

SHC

MAL

STGCM

ENC

EMC

HT1

PNC

HMC

LT

GSCS

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

(Q)

SAFETY: (ORM Tenet: Assess risks vs benefits) ETT/DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR, THE ETT/DCTT MEMBER WILL CORRECT THE SAFETY VIOLATION AND NOTIFY THE ETT/DCTT LEADER OF THE SITUATION. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, ETT/DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE ETT/DCTT LEADER OF THE SITUATION. ETT/DCTT WILL ALLOW WATCH STANDERS TO HANDLE THE ACTUAL CASUALTY. IN THE EVENT WATCH STANDERS DO NOT HANDLE THE ACTUAL CASUALTY, THE ETT/DCTT WILL STEP IN AND TAKE CORRECTIVE ACTION. THE ETT/DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

9. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. Observe personnel dressed out in fire fighting ensembles for signs of heat stress.
- B. Ensure hoses are charged and then secured at the plug and that electrical equipment is not hosed down.
- C. Ensure SCBA cylinders are properly secured when not in use.
- D. No running.
- E. No straddling of hoses.
- F. Two or more people lifting/lowering water tight hatches.
- G. No leaving CO2 or PKP bottles upright untended or unstowed.
- H. No overriding or bypassing safety interlocks.
- I. No loose deck plates, which must have at least two bolts per deck plate.
- J. Ensure personnel wear proper hearing protection.
- K. Ensure personnel remain clear of rotating shafts or machinery.
- L. Do not work on live (energized) electrical equipment without the Commanding Officer's permission and only per NSTM 300.

10. (ORM Tenet: ID Hazards) Safety walk through has been/will be conducted immediately prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill.

11. Heat stress survey to be conducted prior to commencement of drill.

Follow on survey due: \_\_\_\_\_.

12. DCTT Communications: WICS channel ITT1.

PART I: ETT

SCENARIO: A major fuel leak develops in MER 1 LL (4-174-0-E), AFT/Centerline at the #1A Fuel Oil Service Pump (36/72 gpm @ 105 psi) inlet to the discharge cage cutout valve. The leak may be isolated by securing #1A F/O service pump locally or remotely. After the response team has demonstrated the proper initial actions in flushing and covering the fire hazard, DCTT will flash into a fire. The ignition source will be the #1A F/O Service Pump motor.

Method of Imposing Casualty: ETT will initiate drill by giving F/O smell to watch standers.

Method of Imposing Leak: Smell of fuel oil from sample bottle. Spray water from spray bottle and yellow rags to show leak.

Proper initial actions observed by ETT/DCTT for the leak are:

- Report leak to CCS (location, size)
- EOWW recommend OOD sound General Quarters and pass word for a major fuel/lube oil leak in MER 1.
- EOWW follows EOCC/MSFD procedures for a major fuel oil/lube oil leak.
- Isolate the leak/deflect leak away from the heat source. Secure #2A Fuel Oil Service Pump.
- Obtain and shoulder an EEBD.
- Secure heat sources/operating equipment.
- Activate AFFF bilge sprinkling for 1 minute.

Method of Imposing: WATCHSTANDER WILL PUSH AFFF BILGE SPRINKLING BUTTON.

- Activate AFFF hose reels to flush flammable liquid to the bilge. When watch stander(s) test AFFF agent, SPACE ETT will disclose AFFF check SAT/UNSAT.

Method of Imposing: AFFF-ZIP LOCK BAG OF WHITE STYROFOAM PEANUTS.

- Deploy PKP extinguishers to the scene. SPACE ETT will disclose agent check SAT/UNSAT.

Method of Imposing: purple rag in zip-lock bag.

NOTE: AFFF DCTT will place AFFF station in Re-circulation. Once the AFFF station is activated, AFFF DCTT will secure motor locally to minimize wear and tear on the isolation valve. In the event of actual casualty AFFF DCTT will place station back in normal operation. AFFF flow rate:

ER 2      460 gpm/26 sprinkler heads = 27.5 gallons of AFFF per minute  
          190 gpm/2-95 gpm nozzles = 11.5 gallons of AFFF (simulate)  
          5 gallons of AFFF per flag = approx 5 flags per minute (bilge spr)  
  = approx 1 flag per minute per nozzle

- Apply AFFF to flush flammable liquid to the bilge.

When the SPACE ETT is satisfied with the watch standers initial actions and the flammable liquid is being flushed into the bilges, the SPACE DCTT will disclose to the SPACE watch that a fire has broken out in the bilges.

Method of Imposing: RED RAG TO INDICATE FIRE. BLACK RAG TO INDICATE SMOKE.

## PLANT STATUS

PLANT READINESS (MODE)		FULL	SPLIT	TRAIL	AUX	COLD	IRON
GAS TURBINE ENGINES		1A	1B	2A	2B		
GAS TURBINE GENERATORS	1	2	3	// SPLIT	PLANT	PARALLEL	
A/C PLANTS	1	2	3	4			
L/O SERVICE PUMPS		1A	1B	2A	2B		
F/O SERVICE PUMPS		1A	1B	2A	2B		
SEAWATER SERVICE PUMPS	1	2	3	4	5		
FIRE PUMPS	1	2	3	4	5	6	
L/O PURIFIERS	1	2					
F/O PURIFIERS/XFR PUMPS	1	2					
HPAC/HPAD'S	# 1 (AUTO / MANUAL)				#2 (AUTO / MANUAL)		
PACS	# 1 (115 / 120 / 125)						
	# 2 (115 / 120 / 125)						
	# 3 (115 / 120 / 125)						
LPAD'S	1	2	3	4			
F/O SERVICE TANK ON SUCTION		1A	1B	2A	2B		

OOE EQUIPMENT: \_\_\_\_\_

ADDITIONAL COMMENTS: \_\_\_\_\_



## ART II: DCTT

### SEQUENCE OF EVENTS:

1. SPACE ETT/DCTT will disclose that the fire is increasing in intensity. The fire will continue to grow to the point that it is out of control and evacuation is necessary.

Method of Imposing: ADVANCE ON WATCHSTANDERS WITH RED AND BLACK RAGS.

2. Upon evacuating the space, watch stander will demonstrate SEED (by reaching for it and shouting out "activating SEED") and don a(n) training EEBD.

NOTE: MECHANICAL ISOLATION DCTT and ELECTRICAL ISOLATION DCTT will check for mechanical and electrical isolation of systems in the space. DCA/Scene Leader will make the decision to electrically isolate space lighting based on space conditions and if HALON bad scenario develops because of watch standers' actions.

Method of Imposition: As Found.

If HALON bad, Team leader/investigators will see Black Smoke/Red Rags. After electrical isolation has been verified by IN SPACE DCTT, Electrical Isolation DCTT will restore lighting to the space.

Electrical isolation will be complete with the following exceptions:

#1 SCU, 1A/1B IECs, IVCS jack boxes/phones, 1MC and 1MC lighting  
Halon indicators

NOTE: After watch standers evacuate the space, ETT/DCTT will check that the following actions are being completed:

- A. Securing of hatch to the space (setting Zebra).
- B. Pulling of emergency trips.
- C. Accounting for evacuees.
- D. Activation of bilge sprinkling.
- E. HALON activated, insure discharge, open bypass if necessary.

NOTE: DCTT will check that watch standers report to CCS.

3. Halon activation/ventilation trip will be disclosed by OSL DCTT manually by operating the sensor when a watch stander activates the system.

Method of Imposing: ACTIVATION OF CO2 BOTTLE PROP. DCTT LIFTING OF PNEUMATIC SWITCHES.

NOTE: HALON may be activated from either the affected space or from the DC Deck. In the event that it is activated from the space, the IN SPACE DCTT will prevent the watch stander from ACTUALLY charging the system and will report to the OSL DCTT so that he can activate alarms.

NOTE: IN SPACE DCTT will check for in space alarm activation (lights, horn) and ventilation shut-down. DCC DCTT check activation and vent shut-down alarms in CCS.

4. Primary HALON activation/discharge will be: (choose)

A. GOOD provided watch stander actions are correct (DC deck access closed and dogged down; all module doors and other fittings open to outside atmosphere are closed). This will be disclosed with a white disk held in view port. Fire party will wait for a minimum 15 minute soak time and then reenter space. If watch stander actions are incorrect, then indicate HALON BAD.

B. BAD is indicated with a black disk by DCTT (this will require Reserve HALON to be activated when determined by OSL). DCTT will disclose to OSL that primary HALON failed due to a ruptured pipe downstream of the time delay. Additionally, if HALON is BAD, no indication of HALON release will be seen on DC Console and outside the affected space after 60 seconds. If reserve HALON is GOOD as disclosed by DCTT, then a white disk will be displayed. Fire Party will wait for a minimum 15 minute soak time and then reenter space.

XXXXX C. BAD as indicated with a black disk by DCTT. When determined by OSL, reserve HALON will be activated but will be disclosed by DCTT as BAD with no indication on DC Console or on bulkhead outside the affected space after 60 seconds. Fire party will then enter the space.

Method of Imposing for (BAD): Primary Halon--No lifting of pneumatic switches (bad CO2 Bottle). Reserve Halon--Lifting pneumatic switches but no discharge switch (bad time delay). If watch stander attempts to open bypass valve DCTT will give valve handle to watch stander (broken valve).

NOTE: (GOOD scenario only) If personnel fail to activate HALON or close up the space properly as determined by the DCTT, then HALON will be BAD (DCTT preps will change accordingly). The fire party shall enter the space and fight the fire. They should demonstrate their ability in hose handling, team coordination, communication, knowledge of major equipment location, and overhauling the fire.

5. When BOUNDARY DCTT is satisfied with the level of knowledge and proficiency of the fire boundary setters, he will disclose boundaries are hot for bad scenario cool for good.

Method of Imposing: (Bad) Gray BUBBLE WRAP / (Good) as found

6. One investigator will transit down the escape trunk to investigate the status of HALON. The other investigator will remain on the DC Deck. They will report conditions as found to the Scene Leader and Repair Party Leader. Once the smoke and fire boundaries, OOD, Scene Leader and investigators have reported conditions of the fire, the DCA shall make the call that HALON is GOOD/BAD.

Method of Imposing: (BAD) Black disk in view port/ hot boundaries/ black smoke from vents--OOD/ hot door--Scene Leader/ strobe light in L/L view port (GOOD) white disk in view port

7. Scene Leader energizes bilge sprinkling for an additional 2 minutes. At the conclusion of the 2 minute period, the Scene Leader will secure the bilge sprinkling system.

NOTE: AFFF system in re-circulation; watch stander pushes appropriate buttons.

- #1 HOSE DCTT will prevent #1 plug man from activating AFFF hose reel.
9. #2 HOSE DCTT will remove Inline Eductor hose from AFFF can before charging the hose and secure #2 hose at the FIRE PLUG AFTER #2 HOSE has been charged.
10. SCBA control will be maintained by the DCTT at the SCENE. all Personnel who will actually activate an SCBA.
11. When the team tests the agent, On Scene DCTT will disclose agent check. SAT.

Method of Imposing: AFFF - ZIP LOCK BAG WITH WHITE STYROFOAM PEANUTS.

12. When access man checks hatch for heat, On Scene DCTT will disclose a HOT hatch for bad scenario or cool for good.

Method of Imposing: (BAD) GRAY BUBBLE WRAP/ (GOOD) AS FOUND

13. As the fire party enters the space IN SPACE DCTT will disclose smoke is in the space.

Method of Imposing: Smoke generator

14. When all readily visible flames have disappeared, the team leader will declare "Fire Out, Re-flash Watch Set".

Method of Imposing: RED AND BLACK RAGS BEHIND THE BACK.

5. As the team leader investigates the space for Hot Spots/Hang Fires using the NFTI, IN SPACE DCTT will disclose 1 Hot Spot(s)/Hang Fire(s).

Method of Imposing: canteen with hot water.

16. When Team Leader checks bilge for AFFF coverage. IN SPACE DCTT discloses there is a vapor lock on all bilge surfaces.

Method of Imposing: White sheet laying in bilge

17. When overhaul gear and second hose team enters the space and reaches lower level, the IN SPACE DCTT will disclose the fire is overhauled.

Method of Imposing: Team Leader will instruct hose teams how overhaul will be conducted in space. Overhaul will be complete when all bilge surfaces are vapor secured.

18. DCA orders desmoking procedures for the affected space, IN SPACE DCTT will determine Fire Team's knowledge of desmoking procedures as space is desmoked.

Method of Imposing: DESMOKING OF SPACE USING POSITIVE VENTILATION.

19. Gas Free Petty Officer will calibrate the atmospheric test gear on main deck. He will be questioned by DCTT regarding knowledge of equipment and procedures.

20. Once desmoking is complete, DCTT will stop drill and debrief on station.

## 21. SYMPTOMS

### A. LEAK:

- (1) High bilge level alarm.
- (2) Low tank level alarm.
- (3) Smell of fuel/lube oil in space.
- (4) Flammable liquid in bilge.
- (5) Faulty flange/piping/flex hose/mechanical seal.

### B. FIRE:

- (1) Smoke and flames in space.
- (2) Smoke and fire alarms.
- (3) Hot Hatch, Hot Bulkhead.

## 22. CAUSES

- A. Major lube oil leak.
- B. Major fuel oil leak.
- C. Electrical fire.

## 23. AUTHORIZED DISCLOSURES:

1. -Lifting of sensor alarms to indicate flooding.
2. -Opening of F/O Unloader By-pass Vlv for loss of F/O pressure.
3. -Spray bottle with yellow rag indicating Fuel Oil/Lube Oil leak.
4. -Yellow rag on deck indicating Fuel Oil/Lube Oil on deck.
5. -Fire out of control: Waving red rag vigorously over head.
6. -Fire contained: Rags waved at waist level.
7. -Fire out: Rags placed behind back.
8. -Halon flooding indications: Activation of appropriate pressure switches.
9. -Dropping AFFF tank level: Using magnet/tape on sight glass.
10. -Hot bulkhead or door disclosed by placing bubble wrap on bulkhead or Door.
11. -Rags placed in bilge for hazard being flushed to bilge.
12. -Alarm indications in CCS.
13. -Halon good indication: No disk/white disk placed at portholes.
14. -Halon bad indication: Black disk placed at portholes.
15. -Zip lock bag with purple rag indicates PKP test satisfactory.
16. -Zip lock bag with white styrofoam peanuts on deck for AFFF hose test.
17. -Tap on PKP bottle for empty bottle.
18. -Apply stickies with handwritten notes to disclose various parameters to CCS/EDO.
19. -Apply strip of masking tape to locks simulated cut.
20. -Desmoking complete, (no actual smoke) removal of black rags on hanger.
21. -AFFF fake activator buttons over actual button covers.
22. -Halon 5LB co2 bottle prop.

23. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

1. -Activation or energizing firefighting equipment as briefed.
2. -Lightoff of SCBAs and EEBDs except as briefed.
3. -Maneuvering the ship to minimize smoke re-ingestion.
4. -Smoke observations by the OOD
5. -Halon 15 min. soak time.
6. -Fuel Oil/Lube Oil leak..
7. -Liquid in bilge.
8. -Smoke & fire symptoms.
9. -Electrical & mechanical isolation as briefed.
10. -Rake will be only overhaul gear item taken into space.
11. -Overhaul of space.
12. -Starting and stopping of engineering equipment, except as authorized by ETT/DCTT.
13. -Breaking of Draeger tubes.
14. -Open Repair Lockers 2, 3, and 5 prior to drill.
15. -Relaxing of FFEs and SCBA facepieces once Battle dress sat as briefed.
16. -Food service personnel will continue meal prep if required.
17. -Dewatering procedures.
18. -Cutting locks on spaces containing fire boundaries.
19. -Bolt cutters will be taped over during drill.
20. -Charging hoses as briefed.
21. -Charged hoses will be closed by taped/bungee cord by DCTT (actual casualty removed.)
22. -Setting positive and negative ventilation.
23. -CCS starting standby GTG.
24. -CCS watch isolation of EPCC Fuses as briefed.
25. -Muster non-duty section personnel.
26. -Fuses from fuse panels will not be pulled unless actual emergency.  
A tag will be hung indicating fuse was pulled.

OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE

# EVOLUTION EVALUATION FORM

## ROUTING

ITT LEADER \_\_\_\_\_  
TEAM LEADER \_\_\_\_\_  
EVALUATOR \_\_\_\_\_

ETT/DCTT/CSTT/STT/MTT  
EVOLUTION/DRILL DESCRIPTION  
WATCHSTATION/ WATCHSTANDER  
EVALUATOR

DATE: \_\_\_\_\_

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_

2. OTHER PROCEDURAL DEFICIENCIES NOTED: lost track of ETT  
o Evacuation procedure o still running in place  
o Evacuation at 10:15

3. COMMUNICATIONS: Speech leader on IMC  
Announced from ground leader to Rep 2  
Started recording

4. MATERIAL: Wetly to Rep 3  
- C. phase ground on 3 surging

5. TRAINING TEAM DEFICIENCIES: > Checklists

6. RECOMMENDATIONS: > Recommendations to media isolation  
> No Repeat leader evacuations until Hoken bar!  
> Use Checklists more effectively

Surf Rep 2 back Run  
vict Rep 3

> Boundary setting trying 1-med isolation?

- still no confirmation of ETT may?

- Rep 5 to Rep 7?

- JICA changes?  
on Project desk.

1341 - GQ

1342 - Class B

- Class B too out of control

1345 Rep 2 state

1346 Main affected } → IMC  
→ tell Rep 1/2/3 10

DCO

DCTT LDR:

Approved: CO

USS COLE (DDG 67)

DCTT BRIEF

## MAIN SPACE FIRE DRILL (U/W)

Compt 4-174-0-E Noun Name MER 1 Date: 20080501

1. GENERAL DESCRIPTION: During normal underway operations, a flammable liquid leak/spray is discovered in NR 1 Main Engine Room, resulting in a major class "B" fire. The EOOW directs space isolation and initial fire fighting efforts. The ERO/PSM/ARO attempt to combat the fire. The fire is declared out of control and the space is evacuated. Primary HALON is activated which is evaluated as good/bad. If bad, Scene Leader activates reserve HALON which is evaluated as good/bad. The fire party must/does not need to enter the space to combat the fire.

2. OBJECTIVE: Training/Evaluation General Quarters. (ORM Tenet: Supervise)

3. FXP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning Battle Stations
MOB-D-9-SF	Main Space Fire Drill
MOB-D-11-SF	Setting Material Condition (Yoke and Zebra)
MOB-D-23-SF	Locating DC Fittings

4. The training period will be between TBD.

5. LESSONS LEARNED LAST DRILL: OSL needs to know space layout and establish choke points. Ensure investigators correctly identify halon on release panel. Quickly and correctly establish fire boundaries and report.

6. Lockers will be debriefed at Repair lockers after the DCTT debrief. DCTT debrief will be conducted following the drill in the Wardroom.

## 7. DCTT/ETT Assignments:

DCCT Leader (DCC)	LCDR [REDACTED]	(Q)
DCC	MS1 [REDACTED]	(Q)
Rover	GSMC [REDACTED]	(Q)
COD	QMC [REDACTED]	(Q)
Scene Leader	DC1 [REDACTED]	(Q)
Locker Leader	HCMC [REDACTED]	(Q)
#1 Hose	GMC [REDACTED]	(Q)
#2 Hose	SKC [REDACTED]	(Q)
In Space #1	DC1 [REDACTED]	(Q)
In Space #2	SHC [REDACTED]	(Q)
Investigators	MA1 [REDACTED]	(Q)
Boundrymen	STGCM [REDACTED]	(Q)
	ENC [REDACTED]	(Q)
Electrical Isolation	EMC [REDACTED]	(Q)
Mechanical Isolation	HT1 [REDACTED]	(Q)
AFFF Operator	PNC [REDACTED]	(Q)
Medical	HMC [REDACTED]	(Q)
ETT Leader	LT [REDACTED]	(Q)
SPACE ETT	GSCS I [REDACTED]	(Q)

8. SAFETY: (ORM Tenet: Assess risks vs benefits) ETT/DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR, THE ETT/DCTT MEMBER WILL CORRECT THE SAFETY VIOLATION AND NOTIFY THE ETT/DCTT LEADER OF THE SITUATION. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, ETT/DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE ETT/DCTT LEADER OF THE SITUATION. ETT/DCTT WILL ALLOW WATCH STANDERS TO HANDLE THE ACTUAL CASUALTY. IN THE EVENT WATCH STANDERS DO NOT HANDLE THE ACTUAL CASUALTY, THE ETT/DCTT WILL STEP IN AND TAKE CORRECTIVE ACTION. THE ETT/DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

9. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. Observe personnel dressed out in fire fighting ensembles for signs of heat stress.
- B. Ensure hoses are charged and then secured at the plug and that electrical equipment is not hosed down.
- C. Ensure SCBA cylinders are properly secured when not in use.
- D. No running.
- E. No straddling of hoses.
- F. Two or more people lifting/lowering water tight hatches.
- G. No leaving CO2 or PKP bottles upright untended or unstowed.
- H. No overriding or bypassing safety interlocks.
- I. No loose deck plates, which must have at least two bolts per deck plate.
- J. Ensure personnel wear proper hearing protection.
- K. Ensure personnel remain clear of rotating shafts or machinery.
- L. Do not work on live (energized) electrical equipment without the Commanding Officer's permission and only per NSTM 300.

10. (ORM Tenet: ID Hazards) Safety walk through has been/will be conducted immediately prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill.

11. Heat stress survey to be conducted prior to commencement of drill.

Follow on survey due: \_\_\_\_\_.

12. DCTT Communications: WICS channel ITT1.

## PART I: ETT

SCENARIO: A major fuel leak develops in MER 1 LL (4-174-0-E), AFT/Centerline at the #1A Fuel Oil Service Pump (36/72 gpm @ 105 psi) inlet to the discharge page cutout valve. The leak may be isolated by securing #1A F/O service pump locally or remotely. After the response team has demonstrated the proper initial actions in flushing and covering the fire hazard, DCTT will flash into a fire. The ignition source will be the #1A F/O Service Pump motor.

Method of Imposing Casualty: ETT will initiate drill by giving F/O smell to watch standers.

Method of Imposing Leak: Smell of fuel oil from sample bottle. Spray water from spray bottle and yellow rags to show leak.



Proper initial actions observed by ETT/DCTT for the leak are:

- Report leak to CCS (location, size)
- EOOW recommend OOD sound General Quarters and pass word for a major fuel/lube oil leak in MER 1.
- EOOW follows EOCC/MSFD procedures for a major fuel oil/lube oil leak.
- Isolate the leak/deflect leak away from the heat source. Secure #2A Fuel Oil Service Pump.
- Obtain and shoulder an EEBD.
- Secure heat sources/operating equipment.
- Activate AFFF bilge sprinkling for 1 minute.

Method of Imposing: WATCHSTANDER WILL PUSH AFFF BILGE SPRINKLING BUTTON.

- Activate AFFF hose reels to flush flammable liquid to the bilge. When watch stander(s) test AFFF agent, SPACE ETT will disclose AFFF check SAT/UNSAT.

Method of Imposing: AAAA-ZIP LOCK BAG OF WHITE STYROFOAM PEANUTS.

- Deploy PKP extinguishers to the scene. SPACE ETT will disclose agent check SAT/UNSAT.

Method of Imposing: purple rag in zip-lock bag.

NOTE: AFFF DCTT will place AFFF station in Re-circulation. Once the AFFF station is activated, AFFF DCTT will secure motor locally to minimize wear and tear on the isolation valve. In the event of actual casualty AFFF DCTT will place station back in normal operation. AFFF flow rate:

[illegible]

- Apply AFFF to flush flammable liquid to the bilge.

When the SPACE ETT is satisfied with the watch standers initial actions and the flammable liquid is being flushed into the bilges, the SPACE DCTT will disclose to the SPACE watch that a fire has broken out in the bilges.

Method of Imposing: RED RAG TO INDICATE FIRE. BLACK RAG TO INDICATE SMOKE.

# PLANT STATUS

PLANT READINESS (MODE)	FULL SPLIT TRAIL AUX COLD IRON					
GAS TURBINE ENGINES	1A	1B	2A	2B		
GAS TURBINE GENERATORS	1	2	3 // SPLIT	PLANT	PARALLEL	
A/C PLANTS	1	2	3	4		
L/O SERVICE PUMPS	1A	1B	2A	2B		
F/O SERVICE PUMPS	1A	1B	2A	2B		
SEAWATER SERVICE PUMPS	1	2	3	4	5	
FIRE PUMPS	1	2	3	4	5	6
L/O PURIFIERS	1	2				
F/O PURIFIERS/XFR PUMPS	1	2				
HPAC/HPAD'S	# 1 (AUTO / MANUAL)			#2 (AUTO / MANUAL)		
LPAC'S	# 1 (115 / 120 / 125)					
	# 2 (115 / 120 / 125)					
	# 3 (115 / 120 / 125)					
LPAD'S	1	2	3	4		
F/O SERVICE TANK ON SUCTION	1A	1B	2A	2B		

· OOC EQUIPMENT: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ADDITIONAL COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## PART II: DCTT

### SEQUENCE OF EVENTS:

1. SPACE ETT/DCTT will disclose that the fire is increasing in intensity. The fire will continue to grow to the point that it is out of control and evacuation is necessary.

Method of Imposing: ADVANCE ON WATCHSTANDERS WITH RED AND BLACK RAGS.

2. Upon evacuating the space, watch stander will demonstrate SEED (by reaching for it and shouting out "activating SEED") and don a(n) training EEBD.

NOTE: MECHANICAL ISOLATION DCTT and ELECTRICAL ISOLATION DCTT will check for mechanical and electrical isolation of systems in the space. DCA/Scene Leader will make the decision to electrically isolate space lighting based on space conditions and if HALON bad scenario develops because of watch standers' actions.

Method of Imposition: As Found.

If HALON bad, Team leader/investigators will see Black Smoke/Red Rags. After electrical isolation has been verified by IN SPACE DCTT, Electrical Isolation DCTT will restore lighting to the space.

Electrical isolation will be complete with the following exceptions:

#1 SCU, 1A/1B IECs, IVCS jack boxes/phones, 1MC and 1MC lighting  
Halon indicators

NOTE: After watch standers evacuate the space, ETT/DCTT will check that the following actions are being completed:

- A. Securing of hatch to the space (setting Zebra).
- B. Pulling of emergency trips.
- C. Accounting for evacuees.
- D. Activation of bilge sprinkling.
- E. HALON activated, insure discharge, open bypass if necessary.

NOTE: DCTT will check that watch standers report to CCS.

3. Halon activation/ventilation trip will be disclosed by OSL DCTT manually by operating the sensor when a watch stander activates the system.

Method of Imposing: ACTIVATION OF CO2 BOTTLE PROP. DCTT LIFTING OF PNEUMATIC SWITCHES.

NOTE: HALON may be activated from either the affected space or from the DC Deck. In the event that it is activated from the space, the IN SPACE DCTT will prevent the watch stander from ACTUALLY charging the system and will report to the OSL DCTT so that he can activate alarms.

NOTE: IN SPACE DCTT will check for in space alarm activation (lights, horn) and ventilation shut-down. DCC DCTT check activation and vent shut-down alarms in CCS.

4. Primary HALON activation/discharge will be: (choose)

- \_\_\_\_\_ A. GOOD provided watch stander actions are correct (DC deck access closed and dogged down; all module doors and other fittings open to outside atmosphere are closed). This will be disclosed with a white disk held in view port. Fire party will wait for a minimum 15 minute soak time and then reenter space. If watch stander actions are incorrect, then indicate HALON BAD.
- \_\_\_\_\_ B. BAD is indicated with a black disk by DCTT (this will require Reserve HALON to be activated when determined by OSL). DCTT will disclose to OSL that primary HALON failed due to a ruptured pipe downstream of the time delay. Additionally, if HALON is BAD, no indication of HALON release will be seen on DC Console and outside the affected space after 60 seconds. If reserve HALON is GOOD as disclosed by DCTT, then a white disk will be displayed. Fire Party will wait for a minimum 15 minute soak time and then reenter space.
- xxxxx C. BAD as indicated with a black disk by DCTT. When determined by OSL, reserve HALON will be activated but will be disclosed by DCTT as BAD with no indication on DC Console or on bulkhead outside the affected space after 60 seconds. Fire party will then enter the space.

Method of Imposing for (BAD): Primary Halon--No lifting of pneumatic switches (bad CO2 Bottle). Reserve Halon--Lifting pneumatic switches but no discharge switch (bad time delay). If watch stander attempts to open bypass valve DCTT will give valve handle to watch stander (broken valve).

NOTE: (GOOD scenario only) If personnel fail to activate HALON or close up the space properly as determined by the DCTT, then HALON will be BAD (DCTT props will change accordingly). The fire party shall enter the space and fight the fire. They should demonstrate their ability in hose handling, team coordination, communication, knowledge of major equipment location, and overhauling the fire.

5. When BOUNDARY DCTT is satisfied with the level of knowledge and proficiency of the fire boundary setters, he will disclose boundaries are hot for bad scenario cool for good.

Method of Imposing: (Bad) Gray BUBBLE WRAP / (Good) as found

6. One investigator will transit down the escape trunk to investigate the status of HALON. The other investigator will remain on the DC Deck. They will report conditions as found to the Scene Leader and Repair Party Leader. Once the smoke and fire boundaries, OOD, Scene Leader and investigators have reported conditions of the fire, the DCA shall make the call that HALON is GOOD/BAD.

Method of Imposing: (BAD) Black disk in view port/ hot boundaries/ black smoke from vents--OOD/ hot door--Scene Leader/ strobe light in L/L view port (GOOD) white disk in view port

7. Scene Leader energizes bilge sprinkling for an additional 2 minutes. At the conclusion of the 2 minute period, the Scene Leader will secure the bilge sprinkling system.

NOTE: AFFF system in re-circulation; watch stander pushes appropriate buttons.

8. #1 HOSE DCTT will prevent #1 plug man from activating AFFF hose reel.
9. #2 HOSE DCTT will remove Inline Eductor hose from AFFF can before charging the hose and secure #2 hose at the FIRE PLUG AFTER #2 HOSE has been charged.
10. SCBA control will be maintained by the DCTT at the SCENE. all Personnel who will actually activate an SCBA.
11. When the team tests the agent, On Scene DCTT will disclose agent check. SAT.

Method of Imposing: AFFF - ZIP LOCK BAG WITH WHITE STYROFOAM PEANUTS.

12. When access man checks hatch for heat, On Scene DCTT will disclose a HOT hatch for bad scenario or cool for good.

Method of Imposing: (BAD) GRAY BUBBLE WRAP/ (GOOD) AS FOUND

13. As the fire party enters the space IN SPACE DCTT will disclose smoke is in the space.

Method of Imposing: Smoke generator

14. When all readily visible flames have disappeared, the team leader will declare "Fire Out, Re-flash Watch Set".

Method of Imposing: RED AND BLACK RAGS BEHIND THE BACK.

15. As the team leader investigates the space for Hot Spots/Hang Fires using the NFTI, IN SPACE DCTT will disclose 1 Hot Spot(s)/Hang Fire(s).

Method of Imposing: canteen with hot water.

16. When Team Leader checks bilge for AFFF coverage. IN SPACE DCTT discloses there is a vapor lock on all bilge surfaces.

Method of Imposing: White sheet laying in bilge

17. When overhaul gear and second hose team enters the space and reaches lower level, the IN SPACE DCTT will disclose the fire is overhauled.

Method of Imposing: Team Leader will instruct hose teams how overhaul will be conducted in space. Overhaul will be complete when all bilge surfaces are vapor secured.

18. DCA orders desmoking procedures for the affected space, IN SPACE DCTT will determine Fire Team's knowledge of desmoking procedures as space is desmoked.

Method of Imposing: DESMOKING OF SPACE USING POSITIVE VENTILATION.

19. Gas Free Petty Officer will calibrate the atmospheric test gear on main deck. He will be questioned by DCTT regarding knowledge of equipment and procedures.

20. Once desmoking is complete, DCTT will stop drill and debrief on station.

## 21. SYMPTOMS

### A. LEAK:

- (1) High bilge level alarm.
- (2) Low tank level alarm.
- (3) Smell of fuel/lube oil in space.
- (4) Flammable liquid in bilge.
- (5) Faulty flange/piping/flex hose/mechanical seal.

### B. FIRE:

- (1) Smoke and flames in space.
- (2) Smoke and fire alarms.
- (3) Hot Hatch, Hot Bulkhead.

## 22. CAUSES

- A. Major lube oil leak.
- B. Major fuel oil leak.
- C. Electrical fire.

## 23. AUTHORIZED DISCLOSURES:

1. -Lifting of sensor alarms to indicate flooding.
2. -Opening of F/O Unloader By-pass Vlv for loss of F/O pressure.
3. -Spray bottle with yellow rag indicating Fuel Oil/Lube Oil leak.
4. -Yellow rag on deck indicating Fuel Oil/Lube Oil on deck.
5. -Fire out of control: Waving red rag vigorously over head.
6. -Fire contained: Rags waved at waist level.
7. -Fire out: Rags placed behind back.
8. -Halon flooding indications: Activation of appropriate pressure switches.
9. -Dropping AFFF tank level: Using magnet/tape on sight glass.
10. -Hot bulkhead or door disclosed by placing bubble wrap on bulkhead or Door.
11. -Rags placed in bilge for hazard being flushed to bilge.
12. -Alarm indications in CCS.
13. -Halon good indication: No disk/white disk placed at portholes.
14. -Halon bad indication: Black disk placed at portholes.
15. -Zip lock bag with purple rag indicates PKP test satisfactory.
16. -Zip lock bag with white styrofoam peanuts on deck for AFFF hose test.
17. -Tap on PKP bottle for empty bottle.
18. -Apply stickies with handwritten notes to disclose various parameters to CCS/EDO.
19. -Apply strip of masking tape to locks simulated cut.
20. -Desmoking complete, (no actual smoke) removal of black rags on hanger.
21. -AFFF fake activator buttons over actual button covers.
22. -Halon 5LB co2 bottle prop.

23. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

1. -Activation or energizing firefighting equipment as briefed.
2. -Lightoff of SCBAs and EEBDs except as briefed.
3. -Maneuvering the ship to minimize smoke re-ingestion.
4. -Smoke observations by the OOD
5. -Halon 15 min. soak time.
6. -Fuel Oil/Lube Oil leak..
7. -Liquid in bilge.
8. -Smoke & fire symptoms.
9. -Electrical & mechanical isolation as briefed.
10. -Rake will be only overhaul gear item taken into space.
11. -Overhaul of space.
12. -Starting and stopping of engineering equipment, except as authorized by ETT/DCTT.
13. -Breaking of Draeger tubes.
14. -Open Repair Lockers 2, 3, and 5 prior to drill.
15. -Relaxing of FFEs and SCBA facepieces once Battle dress sat as briefed.
16. -Food service personnel will continue meal prep if required.
17. -Dewatering procedures.
18. -Cutting locks on spaces containing fire boundaries.
19. -Bolt cutters will be taped over during drill.
20. -Charging hoses as briefed.
21. -Charged hoses will be closed by taped/bungee cord by DCTT (actual casualty removed.)
22. -Setting positive and negative ventilation.
23. -CCS starting standby GTG.
24. -CCS watch isolation of EPCC Fuses as briefed.
25. -Muster non-duty section personnel.
26. -Fuses from fuse panels will not be pulled unless actual emergency.  
A tag will be hung indicating fuse was pulled.

OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE

# EVOLUTION EVALUATION FORM

## ROUTING

ITT LEADER

TEAM LEADER

EVALUATOR

ETT/DCTT/CSTT/STT/MTT  
EVOLUTION/DRILL DESCRIPTION  
WATCHSTATION/ WATCHSTANDER  
EVALUATOR

DATE: 29 SEP 88

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS:

2. OTHER BROCEDURAL DEFICIENCIES NOTED:

Locked cabinet in CCS w/Anderson

Pliny  
Flight Isolation?

Thermostat

3. COMMUNICATIONS:

Missing 2 EVCS headsets in CCS | overhead complete  
reported in error

SCBA - LIGHT - OFFS INCREDIBLE

"H/T Checkpoint complete"

overhead complete

4. MATERIAL:

5. TRAINING TEAM DEFICIENCIES:

M/S in Air space via U/h

Check surface picture

6. RECOMMENDATIONS:

M/S upper boundary

Times upper level if past 15 min point

512 Fls Leak

73 EQ

7 Cass B Air 15.7

78 Main relay →

Main not effected (1521) - 4 min

32 Zebra mark

7 Mech Isolation - Phase I - 5 min

55 Elec Isolation - Phase I

E/F - 7 min

26 out order to enter space

SCBA - Ec light off? 1522

HT 1528

1535 Entered space  
(18 min after fire)

+

1553(4) HT (checkpoint complete)

(19 min in space)



DCO

DCTT LDR:

Approved: CO

USS COLE (DDG 67)

## DCTT BRIEF

## MAIN SPACE FIRE DRILL (U/W)

Compt 4-174-0-E Noun Name MER 1 Date:

1. GENERAL DESCRIPTION: During normal underway operations, a flammable liquid leak/spray is discovered in NR 1 Main Engine Room, resulting in a major class "B" fire. The EOOW directs space isolation and initial fire fighting efforts. The ERO/PSM/ARO attempt to combat the fire. The fire is declared out of control and the space is evacuated. Primary HALON is activated which is evaluated as good/bad. If bad, Scene Leader activates reserve HALON which is evaluated as good/bad. The fire party must/does not need to enter the space to combat the fire.

2. OBJECTIVE: Training/Evaluation General Quarters. (ORM Tenet: Supervise)

3. FXP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning Battle Stations
MOB-D-9-SF	Main Space Fire Drill
MOB-D-11-SF	Setting Material Condition (Yoke and Zebra)
MOB-D-23-SF	Locating DC Fittings

4. The training period will be between TBD.

5. LESSONS LEARNED LAST DRILL: OSL needs to know space layout and establish choke points. Ensure investigators correctly identify halon on release panel. Quickly and correctly establish fire boundaries and report.

6 Lockers will be debriefed at Repair lockers after the DCTT debrief. DCTT debrief will be conducted following the drill in the Wardroom.

## 7. DCTT/ETT Assignments:

DCCT Leader (DCC)	LCDR	(Q)
DCC	MS1	(Q)
Rover	GSMC	(Q)
OOD	QMC	(Q)
Scene Leader	DC1	(Q)
Locker Leader	HMCN	(Q)
#1 Hose	GMC	(Q)
#2 Hose	SKC	(Q)
In Space #1	DC1	(Q)
In Space #2	SHC	(Q)
Investigators	MA1	(Q)
Boundrymen	STGCM	(Q)
	ENC	(Q)
Electrical Isolation	EMC	(Q)
Mechanical Isolation	HT1	(Q)
AFFF Operator	PNC	(Q)
Medical	HMC	(Q)
ETT Leader	LT	(Q)
SPACE ETT	GSCS	(Q)

8. SAFETY: (ORM Tenet: Assess risks vs benefits) ETT/DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR, THE ETT/DCTT MEMBER WILL CORRECT THE SAFETY VIOLATION AND NOTIFY THE ETT/DCTT LEADER OF THE SITUATION. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, ETT/DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE ETT/DCTT LEADER OF THE SITUATION. ETT/DCTT WILL ALLOW WATCH STANDERS TO HANDLE THE ACTUAL CASUALTY. IN THE EVENT WATCH STANDERS DO NOT HANDLE THE ACTUAL CASUALTY, THE ETT/DCTT WILL STEP IN AND TAKE CORRECTIVE ACTION. THE ETT/DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

9. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. Observe personnel dressed out in fire fighting ensembles for signs of heat stress.
- B. Ensure hoses are charged and then secured at the plug and that electrical equipment is not hosed down.
- C. Ensure SCBA cylinders are properly secured when not in use.
- D. No running.
- E. No straddling of hoses.
- F. Two or more people lifting/lowering water tight hatches.
- G. No leaving CO2 or PKP bottles upright untended or unstowed.
- H. No overriding or bypassing safety interlocks.
- I. No loose deck plates, which must have at least two bolts per deck plate.
- J. Ensure personnel wear proper hearing protection.
- K. Ensure personnel remain clear of rotating shafts or machinery.
- L. Do not work on live (energized) electrical equipment without the Commanding Officer's permission and only per NSTM 300.

10. (ORM Tenet: ID Hazards) Safety walk through has been/will be conducted immediately prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill.

11. Heat stress survey to be conducted prior to commencement of drill.

Follow on survey due: \_\_\_\_\_.

12. DCTT Communications: WICS channel ITT1.

## PART I: ETT

SCENARIO: A major fuel leak develops in MER 1 LL (4-174-0-E), AFT/Centerline at the #1A Fuel Oil Service Pump (36/72 gpm @ 105 psi) inlet to the discharge gate cutout valve. The leak may be isolated by securing #1A F/O service pump locally or remotely. After the response team has demonstrated the proper initial actions in flushing and covering the fire hazard, DCTT will flash into a fire. The ignition source will be the #1A F/O Service Pump motor.

Method of Imposing Casualty: ETT will initiate drill by giving F/O smell to watch standers.

Method of Imposing Leak: Smell of fuel oil from sample bottle. Spray water from spray bottle and yellow rags to show leak.

Proper initial actions observed by ETT/DCTT for the leak are:

- Report leak to CCS (location, size)
- EOOW recommend OOD sound General Quarters and pass word for a major fuel/lube oil leak in MER-1.
- EOOW follows EOCC/MSFD procedures for a major fuel oil/lube oil leak.
- Isolate the leak/deflect leak away from the heat source. Secure #2A Fuel Oil Service Pump.
- Obtain and shoulder an EEBD.
- Secure heat sources/operating equipment.
- Activate AFFF bilge sprinkling for 1 minute.

Method of Imposing: WATCHSTANDER WILL PUSH AFFF BILGE SPRINKLING BUTTON.

- Activate AFFF hose reels to flush flammable liquid to the bilge. When watch stander(s) test AFFF agent, SPACE ETT will disclose AFFF check SAT/UNSAT.

Method of Imposing: AFFF-ZIP LOCK BAG OF WHITE STYROFOAM PEANUTS.

- Deploy PKP extinguishers to the scene. SPACE ETT will disclose agent check SAT/UNSAT.

Method of Imposing: purple rag in zip-lock bag.

NOTE: AFFF DCTT will place AFFF station in Re-circulation. Once the AFFF station is activated, AFFF DCTT will secure motor locally to minimize wear and tear on the isolation valve. In the event of actual casualty AFFF DCTT will place station back in normal operation. AFFF flow rate:

MER 2

460 gpm/26 sprinkler heads	= 27.5 gallons of AFFF per minute
190 gpm/2-95 gpm nozzles	= 11.5 gallons of AFFF (simulate)
5 gallons of AFFF per flag	= approx 5 flags per minute (bilge spr)
	= approx 1 flag per minute per nozzle

- Apply AFFF to flush flammable liquid to the bilge.

When the SPACE ETT is satisfied with the watch standers initial actions and the flammable liquid is being flushed into the bilges, the SPACE DCTT will disclose to the SPACE watch that a fire has broken out in the bilges.

Method of Imposing: RED RAG TO INDICATE FIRE. BLACK RAG TO INDICATE SMOKE.

PLANT STATUS

PLANT READINESS (MODE)	FULL SPLIT TRAIL AUX COLD IRON					
GAS TURBINE ENGINES	1A	1B	2A	2B		
GAS TURBINE GENERATORS	1	2	3 // SPLIT	PLANT	PARALLEL	
A/C PLANTS	1	2	3	4		
L/O SERVICE PUMPS	1A	1B	2A	2B		
F/O SERVICE PUMPS	1A	1B	2A	2B		
SEA WATER SERVICE PUMPS	1	2	3	4	5	
FIRE PUMPS	1	2	3	4	5	6
L/O PURIFIERS	1	2				
F/O PURIFIERS/XFR PUMPS	1	2				
HPAC/HPAD'S	# 1 (AUTO / MANUAL)			#2 (AUTO / MANUAL)		
LPAC'S	# 1 (115 / 120 / 125)					
	# 2 (115 / 120 / 125)					
	# 3 (115 / 120 / 125)					
LPAD'S	1	2	3	4		
F/O SERVICE TANK ON SUCTION	1A	1B	2A	2B		

OOE EQUIPMENT: \_\_\_\_\_

\_\_\_\_\_

ADDITIONAL COMMENTS: \_\_\_\_\_

\_\_\_\_\_

## PART II: DCTT

### SEQUENCE OF EVENTS:

1. SPACE ETT/DCTT will disclose that the fire is increasing in intensity. The fire will continue to grow to the point that it is out of control and evacuation is necessary.

Method of Imposing: ADVANCE ON WATCHSTANDERS WITH RED AND BLACK RAGS.

2. Upon evacuating the space, watch stander will demonstrate SEED (by reaching for it and shouting out "activating SEED") and don a(n) training EEBD.

NOTE: MECHANICAL ISOLATION DCTT and ELECTRICAL ISOLATION DCTT will check for mechanical and electrical isolation of systems in the space. DCA/Scene Leader will make the decision to electrically isolate space lighting based on space conditions and if HALON bad scenario develops because of watch standers' actions.

Method of Imposition: As Found.

If HALON bad, Team leader/investigators will see Black Smoke/Red Rags. After electrical isolation has been verified by IN SPACE DCTT, Electrical Isolation DCTT will restore lighting to the space.

Electrical isolation will be complete with the following exceptions:

- #1 SCU, 1A/1B IECs, IVCS jack boxes/phones, LMC and LMC lighting Halon indicators

NOTE: After watch standers evacuate the space, ETT/DCTT will check that the following actions are being completed:

- A. Securing of hatch to the space (setting Zebra).
- B. Pulling of emergency trips.
- C. Accounting for evacuees.
- D. Activation of bilge sprinkling.
- E. HALON activated, insure discharge, open bypass if necessary.

NOTE: DCTT will check that watch standers report to CCS.

3. Halon activation/ventilation trip will be disclosed by OSL DCTT manually by operating the sensor when a watch stander activates the system.

Method of Imposing: ACTIVATION OF CO2 BOTTLE PROP. DCTT LIFTING OF PNEUMATIC SWITCHES.

NOTE: HALON may be activated from either the affected space or from the DC Deck. In the event that it is activated from the space, the IN SPACE DCTT will prevent the watch stander from ACTUALLY charging the system and will report to the OSL DCTT so that he can activate alarms.

NOTE: IN SPACE DCTT will check for in space alarm activation (lights, horn) and ventilation shut-down. DCC DCTT check activation and vent shut-down alarms in CCS.

Primary HALON activation/discharge will be: (choose)

- XXXX A. GOOD provided watch stander actions are correct (DC deck access closed and dogged down; all module doors and other fittings open to outside atmosphere are closed). This will be disclosed with a white disk held in view port. Fire party will wait for a minimum 15 minute soak time and then reenter space. If watch stander actions are incorrect, then indicate HALON BAD.
- \_\_\_\_\_ B. BAD is indicated with a black disk by DCTT (this will require Reserve HALON to be activated when determined by OSL). DCTT will disclose to OSL that primary HALON failed due to a ruptured pipe downstream of the time delay. Additionally, if HALON is BAD, no indication of HALON release will be seen on DC Console and outside the affected space after 60 seconds. If reserve HALON is GOOD as disclosed by DCTT, then a white disk will be displayed. Fire Party will wait for a minimum 15 minute soak time and then reenter space.
- \_\_\_\_\_ C. BAD as indicated with a black disk by DCTT. When determined by OSL, reserve HALON will be activated but will be disclosed by DCTT as BAD with no indication on DC Console or on bulkhead outside the affected space after 60 seconds. Fire party will then enter the space.

Method of Imposing for (BAD): Primary Halon--No lifting of pneumatic switches (bad CO2 Bottle). Reserve Halon--Lifting pneumatic switches but no discharge switch (bad time delay). If watch stander attempts to open bypass valve DCTT will give valve handle to watch stander (broken valve).

NOTE: (GOOD scenario only) If personnel fail to activate HALON or close up the space properly as determined by the DCTT, then HALON will be BAD (DCTT props will change accordingly). The fire party shall enter the space and fight the fire. They should demonstrate their ability in hose handling, team coordination, communication, knowledge of major equipment location, and overhauling the fire.

5. When BOUNDARY DCTT is satisfied with the level of knowledge and proficiency of the fire boundary setters, he will disclose boundaries are hot for bad scenario cool for good.

Method of Imposing: (Bad) Gray BUBBLE WRAP / (Good) as found

6. One investigator will transit down the escape trunk to investigate the status of HALON. The other investigator will remain on the DC Deck. They will report conditions as found to the Scene Leader and Repair Party Leader. Once the smoke and fire boundaries, OOD, Scene Leader and investigators have reported conditions of the fire, the DCA shall make the call that HALON is GOOD/BAD.

Method of Imposing: (BAD) Black disk in view port/ hot boundaries/ black smoke from vents--OOD/ hot door--Scene Leader/ strobe light in L/L view port (GOOD) white disk in view port

7. Scene Leader energizes bilge sprinkling for an additional 2 minutes. At the conclusion of the 2 minute period, the Scene Leader will secure the bilge sprinkling system.

NOTE: AFFF system in re-circulation; watch stander pushes appropriate buttons.

8. #1 HOSE DCTT will prevent #1 plug man from activating AFFF hose reel.
9. #2 HOSE DCTT will remove Inline Eductor hose from AFFF can before charging the hose and secure #2 hose at the FIRE PLUG AFTER #2 HOSE has been charged.
10. SCBA control will be maintained by the DCTT at the SCENE. all Personnel who will actually activate an SCBA.
11. When the team tests the agent, On Scene DCTT will disclose agent check. SAT.

Method of Imposing: AFFF - ZIP LOCK BAG WITH WHITE STYROFOAM PEANUTS.

12. When access man checks hatch for heat, On Scene DCTT will disclose a HOT hatch for bad scenario or cool for good.

Method of Imposing: (BAD) GRAY BUBBLE WRAP/ (GOOD) AS FOUND

13. As the fire party enters the space IN SPACE DCTT will disclose smoke is in the space.

Method of Imposing: Smoke generator

14. When all readily visible flames have disappeared, the team leader will declare "Fire Out, Re-flash Watch Set".

Method of Imposing: RED AND BLACK RAGS BEHIND THE BACK.

15. As the team leader investigates the space for Hot Spots/Hang Fires using the NFTI, IN SPACE DCTT will disclose 1 Hot Spot(s)/Hang Fire(s).

Method of Imposing: canteen with hot water.

16. When Team Leader checks bilge for AFFF coverage. IN SPACE DCTT discloses there is a vapor lock on all bilge surfaces.

Method of Imposing: White sheet laying in bilge

17. When overhaul gear and second hose team enters the space and reaches lower level, the IN SPACE DCTT will disclose the fire is overhauled.

Method of Imposing: Team Leader will instruct hose teams how overhaul will be conducted in space. Overhaul will be complete when all bilge surfaces are vapor secured.

18. DCA orders desmoking procedures for the affected space, IN SPACE DCTT will determine Fire Team's knowledge of desmoking procedures as space is desmoked.

Method of Imposing: DESMOKING OF SPACE USING POSITIVE VENTILATION.

19. Gas Free Petty Officer will calibrate the atmospheric test gear on main deck. He will be questioned by DCTT regarding knowledge of equipment and procedures.

20. Once desmoking is complete, DCTT will stop drill and debrief on station.

## 21. SYMPTOMS

### A. LEAK:

- (1) High bilge level alarm.
- (2) Low tank level alarm.
- (3) Smell of fuel/lube oil in space.
- (4) Flammable liquid in bilge.
- (5) Faulty flange/piping/flex hose/mechanical seal.

### B. FIRE:

- (1) Smoke and flames in space.
- (2) Smoke and fire alarms.
- (3) Hot Hatch, Hot Bulkhead.

## 22. CAUSES

- A. Major lube oil leak.
- B. Major fuel oil leak.
- C. Electrical fire.

## 23. AUTHORIZED DISCLOSURES:

1. -Lifting of sensor alarms to indicate flooding.
2. -Opening of F/O Unloader By-pass Vlv for loss of F/O pressure.
3. -Spray bottle with yellow rag indicating Fuel Oil/Lube Oil leak.
4. -Yellow rag on deck indicating Fuel Oil/Lube Oil on deck.
5. -Fire out of control: Waving red rag vigorously over head.
6. -Fire contained: Rags waved at waist level.
7. -Fire out: Rags placed behind back.
8. -Halon flooding indications: Activation of appropriate pressure switches.
9. -Dropping AFFF tank level: Using magnet/tape on sight glass.
10. -Hot bulkhead or door disclosed by placing bubble wrap on bulkhead or Door.
11. -Rags placed in bilge for hazard being flushed to bilge.
12. -Alarm indications in CCS.
13. -Halon good indication: No disk/white disk placed at portholes.
14. -Halon bad indication: Black disk placed at portholes.
15. -Zip lock bag with purple rag indicates PKP test satisfactory.
16. -Zip lock bag with white styrofoam peanuts on deck for AFFF hose test.
17. -Tap on PKP bottle for empty bottle.
18. -Apply stickies with handwritten notes to disclose various parameters to CCS/EDO.
19. -Apply strip of masking tape to locks simulated cut.
20. -Desmoking complete, (no actual smoke) removal of black rags on hanger.
21. -AFFF fake activator buttons over actual button covers.
22. -Halon 5LB co2 bottle prop.



23. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

1. -Activation or energizing firefighting equipment as briefed.
2. -Lightoff of SCBAs and EEBDs except as briefed.
3. -Maneuvering the ship to minimize smoke re-ingestion.
4. -Smoke observations by the OOD
5. -Halon 15 min. soak time.
6. -Fuel Oil/Lube Oil leak..
7. -Liquid in bilge.
8. -Smoke & fire symptoms.
9. -Electrical & mechanical isolation as briefed.
10. -Rake will be only overhaul gear item taken into space.
11. -Overhaul of space.
12. -Starting and stopping of engineering equipment, except as authorized by ETT/DCTT.
13. -Breaking of Draeger tubes.
14. -Open Repair Lockers 2, 3, and 5 prior to drill.
15. -Relaxing of FFEs and SCBA facepieces once Battle dress sat as briefed.
16. -Food service personnel will continue meal prep if required.
17. -Dewatering procedures.
18. -Cutting locks on spaces containing fire boundaries.
19. -Bolt cutters will be taped over during drill.
20. -Charging hoses as briefed.
21. -Charged hoses will be closed by taped/bungee cord by DCTT (actual casualty removed.)
22. -Setting positive and negative ventilation.
23. -CCS starting standby GTG.
24. -CCS watch isolation of EPCC Fuses as briefed.
25. -Muster non-duty section personnel.
26. -Fuses from fuse panels will not be pulled unless actual emergency.  
A tag will be hung indicating fuse was pulled.

OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE

EVOLUTION EVALUATION FORM

ROUTING

ITT LEADER \_\_\_\_\_

TEAM LEADER \_\_\_\_\_

EVALUATOR \_\_\_\_\_

ETT/DCTT/CSTT/STT/MTT  
EVOLUTION/DRILL DESCRIPTION \_\_\_\_\_  
WATCHSTATION/ WATCHSTANDER \_\_\_\_\_  
EVALUATOR \_\_\_\_\_

DATE: \_\_\_\_\_

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. OTHER PROCEDURAL DEFICIENCIES NOTED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. COMMUNICATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. MATERIAL: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. TRAINING TEAM DEFICIENCIES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. RECOMMENDATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# EVOLUTION EVALUATION FORM

## ROUTING

CO

XO

CDO

FIRE MARSHAL

DATE: 9-21-04

DCTT

EVOLUTION/DRILL DESCRIPTION  
WATCHSTATION/ WATCHSTANDER  
EVALUATOR

WATCH EVALUATION: TRAINING SATISFACTORY UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING SATISFACTORY UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: YOKE NOT SET IN CHAIN LOCKER WHICH CAUSED THE SMOKE FROM SMOKE MACHINE TO SPREAD TO CS OFFICE AND FWD PARTS OF SHIP, PROMPTED ELECTRICIAN TO PUT ON HELMET.
2. OTHER PROCEDURAL DEFICIENCIES NOTED: SPACE NUMBER CALLED INCORRECT OVER IMC, REPAIR V DID NOT HAVE COMPLETE PLOT ON BOARD.
3. COMMUNICATIONS: SAT, GOOD FLOW FROM SCENE TO LOCKER.
4. MATERIAL: 1 BROKEN CLIP ON FF HELMET. (REPAIRED)
5. TRAINING TEAM DEFICIENCIES: NOZZLEMAN DID NOT RECOGNIZE DCTT PROP FOR FIRE CONTAINED, TRAINED WATCH TEAM ON PROPS.
6. RECOMMENDATIONS: OVERALL GOOD DRILL, TEAM LEADER MADE A THOROUGH SWEEP OF CHAIN LOCKER AFTER REALIZING THAT YOKE NOT SET.

GSMC (SW)

# EVOLUTION EVALUATION FORM

ROUTING

CO

XO

~~CDO~~

FIRE MARSHAL

DATE: 9/26/98

DCTT

EVOLUTION/DRILL DESCRIPTION FLOODING SHUTT ALLEY  
WATCHSTATION/ WATCHSTANDER AT SEA FIRE PARTY  
EVALUATOR HT (Bu) CSMC (Bu)  
WATCH EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: NO COMMAND & CONTROL BY OSL.  
FIRE PARTY WAS SCATTERED AND LACKED DIRECTION, PLOTTING IN  
CLS INCOMPLETE.
2. OTHER PROCEDURAL DEFICIENCIES NOTED: REPORT TO CLS OF ELECTRICAL ISOLATION  
COMPLETE (ELECTRICIAN NEEDS TO TELL OSL & CLS)  
ENVU?
3. COMMUNICATIONS: 1 MC IN CLS OOC. WIFCOM NOT GOOD.
4. MATERIAL: NA
5. TRAINING TEAM DEFICIENCIES: NONE
6. RECOMMENDATIONS: HAVE MORE FLOODING DRILLS TO ORGANIZE REPAIR  
PARTY.

# EVOLUTION EVALUATION FORM

ROUTING

CO

XO

CDO

FIRE MARSHAL

DATE: 28 SEPT 00

DCTT

EVOLUTION/DRILL DESCRIPTION

Class "A" fire in General Workshop

WATCHSTATION/ WATCHSTANDER

AT SEA Fire Party

EVALUATOR

Fire Marshal

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS:

NONE

2. OTHER PROCEDURAL DEFICIENCIES NOTED:

Fire Party Personnel enroute to repair locker were grabbing SCBA's from Primary Fire Boundary areas

3. COMMUNICATIONS:

Great

4. MATERIAL:

NONE

5. TRAINING TEAM DEFICIENCIES:

NONE

6. RECOMMENDATIONS:

NONE

# EVOLUTION EVALUATION FORM

XO -

ACTION FOR DCA IN  
POD NOTES.

ROUTING

CO

XO

EDG

FIRE MARSHAL

DATE: 9/30/00

DCTT

EVOLUTION/DRILL DESCRIPTION CLASS "C" #1 FIREPUMP Controller  
WATCHSTATION/ WATCHSTANDER AT SEA  
EVALUATOR CSMC (SC) [REDACTED] AT (SC) [REDACTED]  
WATCH EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: OOD PASSED WORD IN CORRECTLY...  
PHASED "CLASS 'C' IN FWD PUMPROOM". SHOULD BE "CLASS 'C' FIRE FWD  
PUMPROOM IN #1 FIREPUMP Controller "COMPARTMENT # 4-110-0-E."
2. OTHER PROCEDURAL DEFICIENCIES NOTED: PRIMARY F/F TEAM ARRIVED  
AT SCBA SCENE W/O SCBA MASKS IN STBY.
3. COMMUNICATIONS: SLOW TO GET WORD FIRE "CONTAINED"  
"FIRE OUT".
4. MATERIAL: REPAIR IF SCBA'S RESTORED W/O BEING  
CHARGED + MASKS MISSING. RLO'S & RLL'S SHOULD  
MAKE SURE THIS HAPPENS.
5. TRAINING TEAM DEFICIENCIES: NONE NOTED
6. RECOMMENDATIONS: POD NOTE ON RESTORATION & IMPORTANCE  
OF RE-CHARGING SCBA CYLINDERS AFTER USE. PUT AT  
SEA FIRE PARTY DRILL IN POD AS "TBD" AND NOT GIVE  
SPECIFIC TIME.

DCO

DCTT LDR:

Approved: CO

USS COLE (DDG 67)

## DCTT BRIEF

## MAIN SPACE FIRE DRILL (U/W)

Compt 4-174-0-E Noun Name MER 1 Date: 29 SEP 00

1. GENERAL DESCRIPTION: During normal underway operations, a flammable liquid leak/spray is discovered in NR 1 Main Engine Room, resulting in a major class "B" fire. The EOW directs space isolation and initial fire fighting efforts. The ERO/PSM/ARO attempt to combat the fire. The fire is declared out of control and the space is evacuated. Primary HALON is activated which is evaluated as good/bad. If bad, Scene Leader activates reserve HALON which is evaluated as good/bad. The fire party must/does not need to enter the space to combat the fire.

2. OBJECTIVE: Training/Evaluation General Quarters. (ORM Tenet: Supervise)

3. FXP-4 Drill to be conducted during this training period:

MOB-D-3-SF	Manning Battle Stations
MOB-D-9-SF	Main Space Fire Drill
MOB-D-11-SF	Setting Material Condition (Yoke and Zebra)
MOB-D-23-SF	Locating DC Fittings

4. The training period will be between TBD.

5. LESSONS LEARNED LAST DRILL: OSL needs to know space layout and establish choke points. Ensure investigators correctly identify halon on release panel. Quickly and correctly establish fire boundaries and report.

6. Lockers will be debriefed at Repair lockers after the DCTT debrief. DCTT debrief will be conducted following the drill in the Wardroom.

## 7. DCTT/ETT Assignments:

DCCT Leader (DCC)	LCDR	(Q)
DCC	MS1	(Q)
Rover	GSMC	(Q)
OOD	QMC	(Q)
Scene Leader	DC1	(Q)
Locker Leader	HCMC	(Q)
#1 Hose	GMC	(Q)
#2 Hose	SKC	(Q)
In Space #1	DC1	(Q)
In Space #2	SHC	(Q)
Investigators	MA1	(Q)
Boundrymen	STGCM	(Q)
	ENC	(Q)
Electrical Isolation	EMC	(Q)
Mechanical Isolation	HT1	(Q)
AFFF Operator	PNC	(Q)
Medical	HMC	(Q)
ETT Leader	LT	(Q)
SPACE ETT	GSCS	(Q)

8. SAFETY: (ORM Tenet: Assess risks vs benefits) ETT/DCTT MEMBERS ARE THE PRIMARY SAFETY OBSERVERS. DO NOT ALLOW UNSAFE PRACTICES TO OCCUR. IN THE EVENT A SAFETY HAZARD DOES OCCUR, THE ETT/DCTT MEMBER WILL CORRECT THE SAFETY VIOLATION AND NOTIFY THE ETT/DCTT LEADER OF THE SITUATION. IN THE EVENT OF AN ACTUAL CASUALTY IN THE DRILL AREA, ETT/DCTT WILL PASS THE WORD "ACTUAL CASUALTY" AND INFORM THE ETT/DCTT LEADER OF THE SITUATION. ETT/DCTT WILL ALLOW WATCH STANDERS TO HANDLE THE ACTUAL CASUALTY. IN THE EVENT WATCH STANDERS DO NOT HANDLE THE ACTUAL CASUALTY, THE ETT/DCTT WILL STEP IN AND TAKE CORRECTIVE ACTION. THE ETT/DCTT LEADER WILL DETERMINE WHETHER TO CONTINUE WITH THE DRILL.

9. SAFETY PRECAUTIONS: (ORM Tenet: Implement controls)

- A. Observe personnel dressed out in fire fighting ensembles for signs of heat stress.
- B. Ensure hoses are charged and then secured at the plug and that electrical equipment is not hosed down.
- C. Ensure SCBA cylinders are properly secured when not in use.
- D. No running.
- E. No straddling of hoses.
- F. Two or more people lifting/lowering water tight hatches.
- G. No leaving CO2 or PKP bottles upright untended or unstowed.
- H. No overriding or bypassing safety interlocks.
- I. No loose deck plates, which must have at least two bolts per deck plate.
- J. Ensure personnel wear proper hearing protection.
- K. Ensure personnel remain clear of rotating shafts or machinery.
- L. Do not work on live (energized) electrical equipment without the Commanding Officer's permission and only per NSTM 300.

10. (ORM Tenet: ID Hazards) Safety walk through has been/will be conducted immediately prior to commencing the drill. Safety walk through deficiencies will be corrected before commencing the drill.

11. Heat stress survey to be conducted prior to commencement of drill.

Follow on survey due: \_\_\_\_\_.

12. DCTT Communications: WICS channel ITT1.

## PART I: ETT

SCENARIO: A major fuel leak develops in MER 1 LL (4-174-0-E), AFT/Centerline at the #1A Fuel Oil Service Pump (36/72 gpm @ 105 psi) inlet to the discharge page cutout valve. The leak may be isolated by securing #1A F/O service pump locally or remotely. After the response team has demonstrated the proper initial actions in flushing and covering the fire hazard, DCTT will flash into a fire. The ignition source will be the #1A F/O Service Pump motor.

Method of Imposing Casualty: ETT will initiate drill by giving F/O smell to watch standers.

Method of Imposing Leak: Smell of fuel oil from sample bottle. Spray water from spray bottle and yellow rags to show leak.



Proper initial actions observed by ETT/DCTT for the leak are:

- Report leak to CCS (location, size)
- EOOW recommend OOD sound General Quarters and pass word for a major fuel/lube oil leak in MER 1.
- EOOW follows EOCC/MSFD procedures for a major fuel oil/lube oil leak.
- Isolate the leak/deflect leak away from the heat source. Secure #2A Fuel Oil Service Pump.
- Obtain and shoulder an EEBD.
- Secure heat sources/operating equipment.
- Activate AFFF bilge sprinkling for 1 minute.

Method of Imposing: WATCHSTANDER WILL PUSH AFFF BILGE SPRINKLING BUTTON.

- Activate AFFF hose reels to flush flammable liquid to the bilge. When watch stander(s) test AFFF agent, SPACE ETT will disclose AFFF check SAT/UNSAT.

Method of Imposing: AFFF-ZIP LOCK BAG OF WHITE STYROFOAM PEANUTS.

- Deploy PKP extinguishers to the scene. SPACE ETT will disclose agent check SAT/UNSAT.

Method of Imposing: purple rag in zip-lock bag.

NOTE: AFFF DCTT will place AFFF station in Re-circulation. Once the AFFF station is activated, AFFF DCTT will secure motor locally to minimize wear and tear on the isolation valve. In the event of actual casualty AFFF DCTT will place station back in normal operation. AFFF flow rate:

[illegible]

- Apply AFFF to flush flammable liquid to the bilge.

When the SPACE ETT is satisfied with the watch standers initial actions and the flammable liquid is being flushed into the bilges, the SPACE DCTT will disclose to the SPACE watch that a fire has broken out in the bilges.

Method of Imposing: RED RAG TO INDICATE FIRE. BLACK RAG TO INDICATE SMOKE.

PLANT STATUS

PLANT READINESS (MODE)	FULL	SPLIT	TRAIL	AUX	COLD	IRON			
GAS TURBINE ENGINES	1A	1B	2A	2B					
GAS TURBINE GENERATORS	1	2	3 // SPLIT	PLANT	PARALLEL				
A/C PLANTS	1	2	3	4					
L/O SERVICE PUMPS	1A	1B	2A	2B					
F/O SERVICE PUMPS	1A	1B	2A	2B					
SEAWATER SERVICE PUMPS	1	2	3	4	5				
FIRE PUMPS	1	2	3	4	5	6			
L/O PURIFIERS	1	2							
F/O PURIFIERS/XFR PUMPS	1	2							
HPAC/HPAD'S	# 1 (AUTO / MANUAL)			#2 (AUTO / MANUAL)					
LPAC'S	# 1 (115 / 120 / 125)								
	# 2 (115 / 120 / 125)								
	# 3 (115 / 120 / 125)								
LPAD'S	1	2	3	4					
F/O SERVICE TANK ON SUCTION	1A	1B	2A	2B					

· OOC EQUIPMENT: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ADDITIONAL COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## PART II: DCTT

### SEQUENCE OF EVENTS:

1. SPACE ETT/DCTT will disclose that the fire is increasing in intensity. The fire will continue to grow to the point that it is out of control and evacuation is necessary.

Method of Imposing: ADVANCE ON WATCHSTANDERS WITH RED AND BLACK RAGS.

2. Upon evacuating the space, watch stander will demonstrate SEED (by reaching for it and shouting out "activating SEED") and don a(n) training EEBD.

NOTE: MECHANICAL ISOLATION DCTT and ELECTRICAL ISOLATION DCTT will check for mechanical and electrical isolation of systems in the space. DCA/Scene Leader will make the decision to electrically isolate space lighting based on space conditions and if HALON bad scenario develops because of watch standers' actions.

Method of Imposition: As Found.

If HALON bad, Team leader/investigators will see Black Smoke/Red Rags. After electrical isolation has been verified by IN SPACE DCTT, Electrical Isolation DCTT will restore lighting to the space.

Electrical isolation will be complete with the following exceptions:

#1 SCU, 1A/1B IECs, IVCS jack boxes/phones, 1MC and 1MC lighting  
Halon indicators

NOTE: After watch standers evacuate the space, ETT/DCTT will check that the following actions are being completed:

- A. Securing of hatch to the space (setting Zebra).
- B. Pulling of emergency trips.
- C. Accounting for evacuees.
- D. Activation of bilge sprinkling.
- E. HALON activated, insure discharge, open bypass if necessary.

NOTE: DCTT will check that watch standers report to CCS.

3. Halon activation/ventilation trip will be disclosed by OSL DCTT manually by operating the sensor when a watch stander activates the system.

Method of Imposing: ACTIVATION OF CO2 BOTTLE PROP. DCTT LIFTING OF PNEUMATIC SWITCHES.

NOTE: HALON may be activated from either the affected space or from the DC Deck. In the event that it is activated from the space, the IN SPACE DCTT will prevent the watch stander from ACTUALLY charging the system and will report to the OSL DCTT so that he can activate alarms.

NOTE: IN SPACE DCTT will check for in space alarm activation (lights, horn) and ventilation shut-down. DCC DCTT check activation and vent shut-down alarms in CCS.

4. Primary HALON activation/discharge will be: (choose)

- \_\_\_\_\_ A. GOOD provided watch stander actions are correct (DC deck access closed and dogged down; all module doors and other fittings open to outside atmosphere are closed). This will be disclosed with a white disk held in view port. Fire party will wait for a minimum 15 minute soak time and then reenter space. If watch stander actions are incorrect, then indicate HALON BAD.
- \_\_\_\_\_ B. BAD is indicated with a black disk by DCTT (this will require Reserve HALON to be activated when determined by OSL). DCTT will disclose to OSL that primary HALON failed due to a ruptured pipe downstream of the time delay. Additionally, if HALON is BAD, no indication of HALON release will be seen on DC Console and outside the affected space after 60 seconds. If reserve HALON is GOOD as disclosed by DCTT, then a white disk will be displayed. Fire Party will wait for a minimum 15 minute soak time and then reenter space.
- xxxxxx C. BAD as indicated with a black disk by DCTT. When determined by OSL, reserve HALON will be activated but will be disclosed by DCTT as BAD with no indication on DC Console or on bulkhead outside the affected space after 60 seconds. Fire party will then enter the space.

Method of Imposing for (BAD): Primary Halon--No lifting of pneumatic switches (bad CO2 Bottle). Reserve Halon--Lifting pneumatic switches but no discharge switch (bad time delay). If watch stander attempts to open bypass valve DCTT will give valve handle to watch stander (broken valve).

NOTE: (GOOD scenario only) If personnel fail to activate HALON or close up the space properly as determined by the DCTT, then HALON will be BAD (DCTT props will change accordingly). The fire party shall enter the space and fight the fire. They should demonstrate their ability in hose handling, team coordination, communication, knowledge of major equipment location, and overhauling the fire.

5. When BOUNDARY DCTT is satisfied with the level of knowledge and proficiency of the fire boundary setters, he will disclose boundaries are hot for bad scenario cool for good.

Method of Imposing: (Bad) Gray BUBBLE WRAP / (Good) as found

6. One investigator will transit down the escape trunk to investigate the status of HALON. The other investigator will remain on the DC Deck. They will report conditions as found to the Scene Leader and Repair Party Leader. Once the smoke and fire boundaries, OOD, Scene Leader and investigators have reported conditions of the fire, the DCA shall make the call that HALON is GOOD/BAD.

Method of Imposing: (BAD) Black disk in view port/ hot boundaries/ black smoke from vents--OOD/ hot door--Scene Leader/ strobe light in L/L view port (GOOD) white disk in view port

7. Scene Leader energizes bilge sprinkling for an additional 2 minutes. At the conclusion of the 2 minute period, the Scene Leader will secure the bilge sprinkling system.

NOTE: AFFF system in re-circulation; watch stander pushes appropriate buttons.

8. #1 HOSE DCTT will prevent #1 plug man from activating AFFF hose reel.
9. #2 HOSE DCTT will remove Inline Eductor hose from AFFF can before charging the hose and secure #2 hose at the FIRE PLUG AFTER #2 HOSE has been charged.
10. SCBA control will be maintained by the DCTT at the SCENE. all Personnel who will actually activate an SCBA.
11. When the team tests the agent, On Scene DCTT will disclose agent check. SAT.

Method of Imposing: AFFF - ZIP LOCK BAG WITH WHITE STYROFOAM PEANUTS.

12. When access man checks hatch for heat, On Scene DCTT will disclose a HOT hatch for bad scenario or cool for good.

Method of Imposing: (BAD) GRAY BUBBLE WRAP/ (GOOD) AS FOUND

13. As the fire party enters the space IN SPACE DCTT will disclose smoke is in the space.

Method of Imposing: Smoke generator

14. When all readily visible flames have disappeared, the team leader will declare "Fire Out, Re-flash Watch Set".

Method of Imposing: RED AND BLACK RAGS BEHIND THE BACK.

15. As the team leader investigates the space for Hot Spots/Hang Fires using the NFTI, IN SPACE DCTT will disclose 1 Hot Spot(s)/Hang Fire(s).

Method of Imposing: canteen with hot water.

16. When Team Leader checks bilge for AFFF coverage. IN SPACE DCTT discloses there is a vapor lock on all bilge surfaces.

Method of Imposing: White sheet laying in bilge

17. When overhaul gear and second hose team enters the space and reaches lower level, the IN SPACE DCTT will disclose the fire is overhauled.

Method of Imposing: Team Leader will instruct hose teams how overhaul will be conducted in space. Overhaul will be complete when all bilge surfaces are vapor secured.

18. DCA orders desmoking procedures for the affected space, IN SPACE DCTT will determine Fire Team's knowledge of desmoking procedures as space is desmoked.

Method of Imposing: DESMOKING OF SPACE USING POSITIVE VENTILATION.

19. Gas Free Petty Officer will calibrate the atmospheric test gear on main deck. He will be questioned by DCTT regarding knowledge of equipment and procedures.

20. Once desmoking is complete, DCTT will stop drill and debrief on station.

## 21. SYMPTOMS

### A. LEAK:

- (1) High bilge level alarm.
- (2) Low tank level alarm.
- (3) Smell of fuel/lube oil in space.
- (4) Flammable liquid in bilge.
- (5) Faulty flange/piping/flex hose/mechanical seal.

### B. FIRE:

- (1) Smoke and flames in space.
- (2) Smoke and fire alarms.
- (3) Hot Hatch, Hot Bulkhead.

## 22. CAUSES

- A. Major lube oil leak.
- B. Major fuel oil leak.
- C. Electrical fire.

## 23. AUTHORIZED DISCLOSURES:

1. -Lifting of sensor alarms to indicate flooding.
2. -Opening of F/O Unloader By-pass Vlv for loss of F/O pressure.
3. -Spray bottle with yellow rag indicating Fuel Oil/Lube Oil leak.
4. -Yellow rag on deck indicating Fuel Oil/Lube Oil on deck.
5. -Fire out of control: Waving red rag vigorously over head.
6. -Fire contained: Rags waved at waist level.
7. -Fire out: Rags placed behind back.
8. -Halon flooding indications: Activation of appropriate pressure switches.
9. -Dropping AFFF tank level: Using magnet/tape on sight glass.
10. -Hot bulkhead or door disclosed by placing bubble wrap on bulkhead or Door.
11. -Rags placed in bilge for hazard being flushed to bilge.
12. -Alarm indications in CCS.
13. -Halon good indication: No disk/white disk placed at portholes.
14. -Halon bad indication: Black disk placed at portholes.
15. -Zip lock bag with purple rag indicates PKP test satisfactory.
16. -Zip lock bag with white styrofoam peanuts on deck for AFFF hose test.
17. -Tap on PKP bottle for empty bottle.
18. -Apply stickies with handwritten notes to disclose various parameters to CCS/EDO.
19. -Apply strip of masking tape to locks simulated cut.
20. -Desmoking complete, (no actual smoke) removal of black rags on hanger.
21. -AFFF fake activator buttons over actual button covers.
22. -Halon 5LB co2 bottle prop.

23. AUTHORIZED SIMULATIONS: (ORM Tenet: Evaluate control options)

1. -Activation or energizing firefighting equipment as briefed.
2. -Lightoff of SCBAs and EEBDs except as briefed.
3. -Maneuvering the ship to minimize smoke re-ingestion.
4. -Smoke observations by the OOD
5. -Halon 15 min. soak time.
6. -Fuel Oil/Lube Oil leak..
7. -Liquid in bilge.
8. -Smoke & fire symptoms.
9. -Electrical & mechanical isolation as briefed.
10. -Rake will be only overhaul gear item taken into space.
11. -Overhaul of space.
12. -Starting and stopping of engineering equipment, except as authorized by ETT/DCTT.
13. -Breaking of Draeger tubes.
14. -Open Repair Lockers 2, 3, and 5 prior to drill.
15. -Relaxing of FFES and SCBA facepieces once Battle dress sat as briefed.
16. -Food service personnel will continue meal prep if required.
17. -Dewatering procedures.
18. -Cutting locks on spaces containing fire boundaries.
19. -Bolt cutters will be taped over during drill.
20. -Charging hoses as briefed.
21. -Charged hoses will be closed by taped/bungee cord by DCTT (actual casualty removed.)
22. -Setting positive and negative ventilation.
23. -CCS starting standby GTG.
24. -CCS watch isolation of EPCC Fuses as briefed.
25. -Muster non-duty section personnel.
26. -Fuses from fuse panels will not be pulled unless actual emergency.  
A tag will be hung indicating fuse was pulled.

OPERATIONAL RISK MANAGEMENT

- IDENTIFY HAZARDS
- ASSESS THE RISKS vs BENIFITS
- EVALUATE CONTROL OPTIONS
- SUPERVISE

# EVOLUTION EVALUATION FORM

## ROUTING

ITT LEADER \_\_\_\_\_  
TEAM LEADER \_\_\_\_\_  
EVALUATOR \_\_\_\_\_

ETT/DCTT/CSTT/STT/MTT  
EVOLUTION/DRILL DESCRIPTION \_\_\_\_\_  
WATCHSTATION/ WATCHSTANDER \_\_\_\_\_  
EVALUATOR \_\_\_\_\_

DATE: 29 SEP 00

WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: \_\_\_\_\_

2. OTHER PROCEDURAL DEFICIENCIES NOTED: \_\_\_\_\_

*Locked cabinet in CS at Hansen*

*Play  
File 4 Isolation 7*

*Time checks*

3. COMMUNICATIONS: *Missing 2 EVCS headsets in CS*

*overhead complete  
reported in error*

*SCBA - LIGHT - OFFS IN CREW*

*"M/T Checkpoint complete"*

*overhead complete*

4. MATERIAL: \_\_\_\_\_

5. TRAINING TEAM DEFICIENCIES: \_\_\_\_\_

*M/S in Aux space via v/b*

*check surface picture*

6. RECOMMENDATIONS: \_\_\_\_\_

*M/S open boundary*

*timed upon level if past 15 min point*

1512 Fls Leak

573 GQ

577 Cross B Fire

*1517*

578 Hais, relay →

*Major not effected (1521) - 4 min*

579 Isolation

*Major Isolation - Phase I - 5 min*

579 Elec Isolation - Phase I

*1532*

*7 min*

10

*SCBA - Sec light off? 1522*

*1528*

*1535 Entered space*

*(18 min after fire)*

*+*

*1535*

*1553(4) M/T (Checkpoint complete)*

*(19 min in space)*



# EVOLUTION EVALUATION FORM

ROUTING

CO

XO

CDO

FIRE MARSHAL

DATE: 9-21-00

DCTT

EVOLUTION/DRILL DESCRIPTION "A" IN BOSS STORE ROOM 1

WATCHSTATION/ WATCHSTANDER

EVALUATOR GSMC (SU) & DC (SU)

WATCH EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY

TRAINING TEAM EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: YOKE NOT SET IN CHAIN LOCKER WHICH CAUSED THE SMOKE FROM SMOKE MACHINE TO SPREAD TO CS OFFICE AND FWD PARTS OF SHIP, PROMPTED ELECTRICIAN TO PUT ON HELMET.
2. OTHER PROCEDURAL DEFICIENCIES NOTED: SPACE NUMBER CALLED INCORRECT OVER IMC, REPAIR V DID NOT HAVE COMPLETE PLOT ON BOARD.
3. COMMUNICATIONS: SAT, GOOD FLOW FROM SCENE TO LOCKER.
4. MATERIAL: 1 BROKEN CLIP ON FF HELMET. (REPAIRED)
5. TRAINING TEAM DEFICIENCIES: NOZZLEMAN DID NOT RECOGNIZE DETT PROP FOR FIRE CONTAINED, TRAINED WATCH TEAM ON PROPS.
6. RECOMMENDATIONS: OVERALL GOOD DRILL, TEAM LEADER MADE A THOROUGH JUNK OF CHAIN LOCKER AFTER REALIZING THAT YOKE NOT SET.

GSMC (SU) [REDACTED]

# EVOLUTION EVALUATION FORM

ROUTING

CO

XO

~~CDO~~

FIRE MARSHAL

DATE: 9/26/98

DCTT

EVOLUTION/DRILL DESCRIPTION FLOODING SHAPT MILEY  
WATCHSTATION/ WATCHSTANDER AT SEA FIRE PARTY  
EVALUATOR HT (Bu) [REDACTED] CSMC (Bu) [REDACTED]  
WATCH EVALUATION: TRAINING SATISFACTORY / UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING SATISFACTORY / UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: No Command & Control By OSL. Fire Party was scattered and lacked direction, plotting in CCS incomplete.
2. OTHER PROCEDURAL DEFICIENCIES NOTED: Report to CCS of electrical isolation complete (Electrician needs to tell OSL & CCS).  
EMU?
3. COMMUNICATIONS: IMC IN CCS OCC. WIFCOM NOT GOOD.
4. MATERIAL: NA
5. TRAINING TEAM DEFICIENCIES: NONE
6. RECOMMENDATIONS: HAVE MORE FLOODING DRILLS to ORGANIZE REPAIR PARTY.

# EVOLUTION EVALUATION FORM

ROUTING

CO

XO

CDO

FIRE MARSHAL

DATE: 28 SEPT 00

DCTT

EVOLUTION/DRILL DESCRIPTION Class "A" fire in General Workshop  
WATCHSTATION/ WATCHSTANDER AT SEA Fire Party  
EVALUATOR Fire Marshal  
WATCH EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING/SATISFACTORY/UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: NONE
2. OTHER PROCEDURAL DEFICIENCIES NOTED: Fire Party Personnel enroute to repair locker were Grabbing SCBA's From primary Fire Boundary areas
3. COMMUNICATIONS: Great
4. MATERIAL: NONE
5. TRAINING TEAM DEFICIENCIES: NONE
6. RECOMMENDATIONS: NONE

# EVOLUTION EVALUATION FORM

ROUTING

CO

XO

CDO

FIRE MARSHAL

DATE: 9/30/00

DCTT

EVOLUTION/DRILL DESCRIPTION CLASS "C" #1 FIREPump Controller  
WATCHSTATION/ WATCHSTANDER AT SEA  
EVALUATOR CSMC (SW) [REDACTED] & HT (SW) [REDACTED]  
WATCH EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY  
TRAINING TEAM EVALUATION: TRAINING (SATISFACTORY) UNSATISFACTORY

EVALUATOR

1. CONTRARY TO COLE DIRECTIVES/INSTRUCTIONS: OOD PASSED WORDS IN CORRECTLY  
PASSED "CLASS 'C' IN FWD PUMPROOM". SHOULD BE "CLASS 'C' FIRE FWD  
PUMPROOM IN #1 FIREPump Controller "COMPARTMENT # 4-110-0-E."
2. OTHER PROCEDURAL DEFICIENCIES NOTED: PRIMARY F/F TEAM ARRIVED  
AT 300M SOME W/O SCBA MASKS IN STBY.
3. COMMUNICATIONS: SLOW TO GET WORD FIRE "CONTAINED"  
FIRE OUT".
4. MATERIAL: REPAIR IF SCBAS RESTORED W/O BEING  
CHARGED + MASKS MISSING. RLC'S & RLL'S SHOULD  
MAKE SURE THIS HAPPENS.
5. TRAINING TEAM DEFICIENCIES: NONE NOTED
6. RECOMMENDATIONS: POD NOTE ON RESTORATION & IMPORTANCE  
OF RE-CHARGING SCBA CYLINDERS AFTER USE. PUT AT  
THE FIRE PARTY DRILL IN POD AS "TBD" AND NOT GIVE  
SPECIFIC TIME.